Industrial and Commercial Efficiency: The Role, Reform, and Development of Scottish Technical and Commercial Education, 1895-1914

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Abstract

The focus of this work is the response and role of the Scotch Education Department in the restructing of education for the working classes in Scotland in the years 1895-1914. In turn the work concentrates on two areas of education: technical and commercial. This terminology is expanded to include the SED's overall policies toward what it considered the country's "commercial and industrial classes." However, this work does not specifically examine elementary education. Instead, it focuses on the expansion of educational opportunity for this class in the post-elementary phases of their education. A chapter by chapter outline of the work is incorporated into the "Foreword" beginning on page 5.

List of Abbreviations

CCES	Committee of Council on Education in Scotland
Circ.	Circular of Scotch Education Department
DNB	Dictionary of National Biography
EIS	Education Institute of Scotland
EN	Educational News
GWSTC	Glasgow West of Scotland Technical College
HGS	Higher Grade School
HWC	Heriot-Watt College (Archive Citation)
IC	Intermediate Certificate
LC	Leaving Certificate
LNC	Leith Nautical College
MC	Merit Certificate
NLS	National Library of Scotland
SED	Scotch Education Department
SRO	Scottish Record Office
SUA	Strathclyde University Archive (Citation)

Declaration

This thesis has been composed entirely by the author on the basis of his own research and field work.

Thomas Glenn Velek

12th September, 1995

Dedication

This dissertation is dedicated to my loving and supportive wife Cynthia Jane Buob, my equally loving and supportive mother Milli J.W. Velek, to the memory of Janice Buob, and to the glory of God. "We are writing these things so that our joy may be complete" (I John 1:4)

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Previous Printings

Portions of Chapters 1, 2, 5, & 8 were previously presented as papers at the Society for Postgraduate Scottish Studies Annual Conference (April, 1995), and the 1995 Meeting of the Association for Scottish Historical Research (September, 1995). As such they were printed in collections of the conference papers which were pre-circulated to participants, and other interested parties. In addition, portions of Chapters 2, 5, & 6 will be presented as a paper to the Midwest Conference on British Studies at the University of Michigan, Ann Arbor in November 1995.

Forword

During the late 19th and early 20th century Great Britain experienced international economic competition as it had never before in its history. Scotland as a component felt these pressures as well. Its industries and businesses were at the time an important component of the British economy. Under the terms of the 1707 union Scotland retained control over its education system. One of the responses to the new international pressures, to which Scotland was relatively unaccustomed, was an attempt to restructure and reorientate the country's educational system to better meet the needs of industry and commerce.

The primary focus of this work is a comparatively narrow one: the response and role of the Scotch Education Department in this restructuring and reorientating of education in Scotland. In turn the work concentrates on two areas of education in which the SED was active: technical and commercial education. This terminology is expanded to include the SED's overall policies toward what it considered the country's "commercial and industrial classes". In other words those young people who left school at a young age, and were not headed for the university or the professional class. However, the work does not analyse elementary education. The reason for this post-elementary bias is that one of the main policies of the SED was extending the years at school for this class of pupil after the day school. Also, by the turn of the century there was something of a consensus that any specialised commercial or technical training should come after a solid general education. Finally, many of the class issues addressed by the SED such as the problem of young loafers and hooligans were not at issue until adolescence.

Those not going on to university comprised what was by far the majority of Scottish youth, despite the much valued tradition of Scottish education providing a ladder of opportunity from the gutter to the University. As Lynn Jamieson pointed out in her work "We All Left at 14", the vast majority of pupils left school as soon as they could. This was 14 years of age from 1883, but the abundance of exemptions available until the 1901 Act made the actual leaving age much lower, and there often was little encouragement to stay on.[1] Despite the assertions to the contrary from many eminent writers the Scottish educational system did not provide an open path from elementary school to university for all those with ability. The SED recognised this during the years under consideration and was active in pursuing education policies to expand educational opportunities for this class of Scottish youth; whether they are termed "working class" or "commercial and industrial classes".

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[1] "We All Left at 14: Boys' and Girls' Schooling Circa 1900-1930" Jamieson, L. in Fewell, J. & Paterson, F. Girls in Their Prime: Scottish Education Revisted. (Edinburgh, 1990). pp. 16-17.

While this focus is selective it should not be forgotten that discussion concerning these areas took place during a period that was literally swirling with educational change and reform. Chapter One puts the questions into a historical context. It looks at the question of efficiency in education to meet the needs of a changing nation, international competition, and a variety of perceived inadequacies in the education system of Scotland. It should not be forgotten that debate and reform of commercial and technical education were only a part of a much wider picture. In terms of degrees one can argue that they were a relatively minor part; possibly unjustly so.

Larger issues of SED policy such as "system building", raising levels of attendance, the introduction of certificates, and legislation are surveyed in Chapter Two. Even here the focus remains on related areas such as the Higher Grade Schools and Supplementary Courses which were meant to widen the educational scope of the class under discussion. In contrast, those issues of education that primarily related to university bound students, or those seeking a career in one of the old professions are omitted.

Chapters Three and Four provide a wide analysis of the issues surrounding commercial and technical education in Scotland. Once again the focus is on SED policy and involvement. Therefore, the introduction and eventual failure of Leaving Certificates in Commercial and Technical studies receive primary attention. Other issues such as the development, or lack thereof, in non-state schools is not covered. In both cases the wider debate and environment that affected commercial and technical studies is discussed in an effort to put SED policy in perspective.

The principal avenue for delivering technical and commercial education in Scotland was the Continuation Class system. Chapter Five examines continuation education, and the problems of creating a truly national system up until the monumental Education (Scotland) Act of 1908. Chapter Six analyses the provision of the Act as they related to Continuation Classes, and then the impact the legislation had on the developing, and blossoming system of Continuation Classes. This study concludes in 1914 when World War I temporarily halted active change in the field. In both cases the fact that commercial and technical education were a relatively small part of the system is recognised. In addition, the role that Continuation Classes played in the SED policy of extending education for the working classes is at the foundation of the Continuation Class system.

In the case of Continuation Classes the focus is, as before, on the role of the SED. However, though the SED was often the catalyst of change and provided direction, much of continuation education policy was left in the hands of individual school boards. This included, for example, compulsory attendance and the providing

of trade classes. Therefore, where appropriate here and throughout local examples are included.

Chapter Seven examines the Central Institutions of Scotland. These institutions, which included Heriot-Watt College and the Glasgow and West of Scotland Technical College (later the Royal Technical College) were ordained by the SED to be the "crown" of the Continuation Class system. In this sense they were to be the universities for the working classes. The chapter's concentration is on these two large central institutions, and the focus is the impact the SED had on them.

In some ways Chapter Eight is a break from the general direction of the rest of the work, but when placed in context it is a crucial element in the educational policy of the SED toward the group of students under consideration. The chapter discusses the expansion of the role of the school into the areas of children's health and welfare. This includes topics such as physical education, medical inspection, sanitation in schools, and medical treatment in schools. These policies, of course, stretched across the educational spectrum from Higher Class School to the poorest elementary school. Yet their aim was clearly directed at the less affluent schools, where their work ultimately had the biggest impact. In this context these policies were an intrinsic part of the SED's strategy to improve the condition, and even the employment opportunities for the class under consideration. In Chapter 8 a large proportion of the discussion is on the local Boards that implemented the policies.

Ultimately the work examines these areas of education in their relative infancy in the late 19th century and at the beginning of this century, when they were struggling to gain recognition, respect, and a foothold in a country with a strong educational tradition based in large part on the classics at the higher levels, and "general" education throughout. In consequence it does not follow their effects into the 20th century. An additional parameter is set in terms of the area under discussion. Issues are discussed on a national scale, but throughout the work there is a concentration on the West and South to the relative exclusion of the Highlands and Islands. The reason is two-fold. First and foremost, it was in these areas, especially the large industrial and commercial cities such as Glasgow, Dundee, and Edinburgh that there was the greatest need for and development of commercial, technical, and further education generally for the working classes. Much of the discussion in the Highlands, in comparison, was on agricultural studies, and the Continuation Class system in rural areas remained unstable. Second, it was in these areas that there was the greatest amount of local action, and often conflict between SED policy and local control. However, it is recognised that the work will leave much unsaid about these other areas.

This leads to the final thread that runs throughout the work: local versus central control. A prime objective of the SED, and its influential Secretaries Craik, followed by Struthers, was to bring some degree of central control to Scottish education. Cognizant of the demands that the 20th century had and would place on the educational machinery of the nation, Craik believed adamantly that it was only through central direction that a coherent and efficient "system" could be realised. Though Struthers was less outspoken, he nonetheless followed this policy when he replaced Craik. Thus, much of the discussion, for example in the chapters on commercial education and Central Institutions, is on the inevitable conflict between local authorities and the SED in London.

The objective of this study is to fill to some degree a large gap in the historical research on Scottish education and the working class. In her essay "An Exploration into Scottish Education" published in *People and Society in Scotland, Volume II* (Fraser & Morris eds.) Helen Corr explains that, with the exception of Robert D. Anderson's book, there are few studies on the social history of nineteenth and early twentieth century Scottish education. Indeed, the literature on Scottish education during the period deals almost solely with the developing structure of the educational system. In contrast, the effect of education on the industrialising society of Scotland, and the response of education to the industrial and commercial competition of the late 19th and early 20th century is scarce. Humes and Paterson's book, *Scottish Culture and Scottish Education, 1800-1980,* attempts to place education into a cultural context, and the Fraser and Morris offering, *People and Society in Scotland, Vol. II, 1830-1914*, contains the previously mentioned short examination of the topic by Corr.

Certainly the issue of Britain's industrial and commercial decline has received voluminous attention. Dintenfass's *The Decline of Industrial Britain,* and Robbins & Collins collection of essays *British Culture and Economic Decline*, being some of the more modern offerings. However, almost all either look exclusively at England, or at Britain as a whole to the exclusion of a close analysis of Scotland. In contrast, Campbell's *The Rise and Fall of Scottish Industry* is almost the only work that takes Scotland as its central subject. Most of these works consider the issue of education as essential, with the exception of Campbell in which the issue of education plays a relatively small role. However, again the attention to the Scottish experience is minor if not nonexistent. Works dealing exclusively with education such as Roderick & Stephens' *Education and Industry in the Nineteenth Century; The English Disease?* again take England or Britain as their focus. Others such as West's *Education and the Industrial Revolution* again take a broad view, and looks at the issue in its early

incarnation in the first part of the 19th century Although to West's credit, an entire section is devoted to Scottish elementary education.

Equally, there has been no treatment of commercial and technical education in Scotland. Again, Anderson's work is the exception, but it occupies only a relatively small part of a larger study, and does not extend into the fertile period of the early 20th century. The lack of studies devoted to these fields may be symptomatic of the struggle they had gaining recognition within Scottish education, but by 1911 or 1913 they were a crucial element of Scotland's Continuation Classes. Which leads to a note of the lack of any authoritative work on continuation education in Scotland. Again, the best works such as Kelly's *A History of Adult Education in Great Britain* and the contemporary article by Sandiford in the University Review take England as a focus to the relative exclusion of Scotland's substantial progress. The one exception also comes from the beginning of the century. Michael Sadler's 1907 offering *Continuation Schools in England & Elsewhere; Their Place in the Educational System of an Industrial and Commercial State* devotes a chapter to Scotland's Continuation Classes, but of course it lacks any historical analysis and does not cover the years of significant progress after the Education Act of 1908.

Similarly, while university instruction and reform in Scotland has received attention, Central Institutions have been the recipients of significantly less. For example, while there are at least two authoritative institutional histories of Edinburgh University (for example Donaldson's *Four Centuries; Edinburgh University Life*), officials at Heriot-Watt College openly confessed their consternation at the lack of one for the College. Indeed, as discussed in Chapter 7, the histories of the University often neglect to treat the active role the College had in the development of some University departments such as Chemistry.

Finally, the whole issue of working class (or industrial and commercial classes as was Craik's preference) education in Scotland lacks in-depth study. Fine works such as Hurt's *Elementary Schooling and the Working Classes, 1860-1918* again pay attention to England to the practical exclusion of Scotland. This is less true of Paz's *The Politics of Working-Class Education in Britain*, though the focus is on events earlier in the 19th c. This attention to issues south of the border is particularly true when the issues related to problems of youth labour, loafers, hooliganism and education are considered. Hendrick's *Images of Youth* and Humphries' *Hooligans or Rebels* are the authoritative works in the field, but both again take England as the focus. Humphries does give scant mention to the Dundee "school strikes" of 1889 and 1911, and Scottish street gangs in the 1930s, but it lacks any depth of analysis separate from the greater British experience. Furthermore, Humphries examines the

issue of hooligans and youth crime in the context of the larger theory of class conflict and attempts by working class youth to resist conformist modes of behaviour from the dominant middle class. Lacking is a examination of the role of education in their making, or debated uses of education to deal with the problems; especially in terms of Scotland.

This is equally true of the intersecting of the problem of boy labour and education. Still an informative work, Tawney's 1909 article "The Economics of Boy Labour" is English in focus, but touches upon Scottish boy labour in an admirable manner. However, it rarely considers the role of education or the effect the prevailing labour practices had on the further education of working class children. The Scottish perspective is discussed in the local study of Walker (*Juteopolis: Dundee and Its Textile Workers, 1885-1923*), and Smout's standard *A Century of the Scottish People*. However, while an essential element of the field, Walker's offering, in addition to relegating education to a small proportion of the worker's experience, has child labour as only one segment of a larger study. This leaves Smout, who while dealing with the issue, again, as part of a larger work, provides invaluable insight. The contemplated uses of education, particularly physical training and Continuation Classes to address the issues remains unexamined.

Finally, again with the exception of Anderson's work, there is no work dealing with the role of the Scotch Education Department, or the tension that often existed between it and local authorities in Scotland. The influence of the Department and Henry Craik was substantial and deserves analysis. This is especially true with regards to furthering educational opportunities for working class youth, developing an alternate path through Continuation Classes to the advanced work of Central Institutions, and extending the cause of technical and commercial studies. It is just such gaps in the historical analysis of Scottish education that this study hopes to fill.

Chapter One: Introduction

Trumpeting the British decline in commerce, industry, and world trade supremacy was not new as Scotland and the whole of Great Britain faced the dawn of the 20th century. As early as the 1840s warnings had been made in the report of the Select Committee on Import Duties and the Exportation of Machinery. It stated that in Prussia every man was intelligent and that the country was alert to the innovations abroad and the possibilities for competing in world markets. Indeed, the apprehension of a German nation growing ever stronger can be traced back to at least the 1880s. It was then that the German Chancellor Bismarck introduced his system of "state socialism"[2] in order to win over the support of the people to work for the ubiquitous "national interest." However, it would appear that the rhetoric had never been more chilling, and the drive to find practical solution never more determined.

The economic pessimism of the British people, no matter what date one would choose for its commencement, grew in intensity during the years of the Great Depression, roughly 1873-1896. There were mounting fears that Britain was losing ground economically to its foreign rivals. This was heightened by the prevailing view at the time that the industrial progress of one country could only be had at the expense of another. Obviously the progress of these nations had to have been at the expense of the once mighty British Isles.[3]

By the mid-1890s Britain was drawing itself out of the economic slump that had plagued it to varying degrees for years. Yet the alarmist tendency of those who analysed international trade trends did not abate. In 1896 E.E. Williams published "Made In Germany" as a series of article in the New Review, and later in book form. In part one, entitled "Departing Glory" Williams lays a foundation for fear of the growing German industrial strength with a hoard of statistics and figures that show the industrial and commercial progress of the once agricultural nation. He draws special attention to the commercial and diplomatic efforts of the Germans, and the resulting increase in German trade outside of the European markets.[4] In contrast Williams

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[2]Symbolically the system was inaugurated during the previous year with the introduction of a protective tariff system. The tariffs, regularly bemoaned by British contemporaries and future generations, were designed to protect German agriculture and promote the growth of heavy industry. At the turn of the century many economists would look to this tariff system as the foundation stone for the German iron and steel industry, which had now outstripped British output. See generally, Semmel, B. Imperialism and Social Reform, English Social-Imperial Thought 1895-1914. (London, 1960.) p. 23.

[3]Searle, G.R. The Quest For National Efficiency: A Study in British Politics and Political Thought, 1899-1914. (Oxford, 1971) p. 11.

[4]Williams, E.E. (ed. with intro by Austen Albu) Made in Germany. (London, 1896) p. 1. [Williams was a member of the Fabians before resigning from its executive and pursuing a career in journalism. This work was commissioned by William Heinemann, publisher of the New Review.]

paints an unflattering picture of British businessmen and industrialist as hapless, ignorant, and arrogant:[5]

> his robust insularity asserts itself. Germany has not the capital, he will tell you; her workmen are no workmen at all; her capitalists and her managers are poor bureaucratic plodders; the world will soon find out that her products are not of English make, and so forth. And he goes on vocalizing 'Rule Britannia' in his best commercial prose.

Williams offers four suggestions for Government action. These included the adoption of a policy of fair trade, federation of the Empire to develop markets for British goods, and the appointment of more and better educated commercial attaches to overseas diplomatic missions. Foremost was provision for a substantial increase in technical education to bring British industry up to the level of its German rivals. This final point would prove to be the most controversial and hard fought.[6]

The United States was also seen, and often feared, as an industrial and commercial adversary. By 1900 the United States was able to assert itself as a major world economy. For example, it had surpassed Great Britain to become the world's number one in steel production. As America, with its vastly larger geographic size and supply of natural resources grew into an industrial power in its own right, many in the Mother country voiced their concern. The American Invaders by F.A. McKenzie is evidence of this trend. Published in 1902 it declared that America had invaded Britain, and to a lesser extent Europe, not with armed men "but with manufactured products."[7] The leaders of America were deemed to be its captains of industry and financiers whose conquests had a profound effect on Europe, but "No nation has felt the results of this invasion more than England."[8]

According to McKenzie there were a variety of reasons for the success of America that were primarily outside the realm of legislation and governmental action: Americans worked harder, they had more natural resources, a better climate, and American banks and businessmen were more ready to take risks. But McKenzie was also keen to point out that government could play a role. He noted that the American government gave the work force, managers, investors etc. greater freedom, and that tariff protection also supplied an advantage.[9] The result was that not only older industries were under threat, but more importantly America had taken the lead in the

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[5]Ibid., p. 18.
[6]Ibid., ppxxi-xxii.
[7]McKenzie, F. A. The American Invaders. (London, 1902) p. 1.
[8]Ibid.
[9]Austen Albu dismissed the tariff issue as an example of the tendency of British manufactures to "look for external causes of difficulties rather than their own possible inadequacies." Williams, Made In Germany. p. xxxiii.

new industries of the 20th century. America was deemed to reign supreme in industries such as electricity, the typewriter, passenger lift, automobile, and the multiplication of machine tools.[10]

As the century drew to a close British thinkers were hard at work trying to unravel the mystery to Britain's sliding position in the world. Although the hard factual statistics of industry are important in this regard, attention is more appropriately focused on the theories and solutions. There were some who felt that there was something almost inherently superior about the citizens of Britain's competitors. It was their disciplined population, able to overcome any kind of material handicap, which was the source of their strength.[11] Shadwell wrote in his comparative study of the industrial efficiency of Germany, America, and England that it was the "Habits of the people!"[12]

As mentioned previously, many felt that German and American legislation was the cause of its substantial industrial progress. However, for those inclined to take a more encompassing view of the situation this conclusion was far too narrow. Indeed, by 1895 attention had turned to a full evaluation of domestic shortcomings, not foreign advantages. An article in The Saturday Review of December of that year stated:[13]

> The truth seems to be that the progress of Germany depends much more upon the education of her people and upon their scientific knowledge than upon any legislation or other advantage. The workpeople all have the advantage of technical education...and they appear to be more sober and more amenable to discipline than our own workpeople; but it is mainly in the training of the employers and in the possession of scientific skill that Germany excels. Our manufacturers are not as well educated as the Germans generally.

McKenzie, while citing many natural and legislative factors, also laid much of the blame for the "American invasion" at the feet of domestic short-comings. He wrote, "What we must complain about is our bad legislation, our neglected education, our indifference, and excessive optimism."[14] Like Williams, McKenzie was quick to point out that it was in the realm of education that Britain failed in comparison to the Americans. As with the Germans, the American workman was better educated. Citing the poor quality of technical education in Britain, McKenzie proclaimed that

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[10]McKenzie, American Invaders. See generally, pp. xxi, 1-3, 222-225.

[11]Searle. National Efficiency. p. 67.

[12]Shadwell, A. Industrial Efficiency: A Comparative Study of Industrial Life in England, Germany, & America. (London, 1906) p. 7.

[13]"German Industrial Progress" The Saturday Review of Politics, Literature, Science, and Art. Dec. 19, 1895, Vol LX, p. 806.

[14]McKenzie, American Invaders. pp. 222-223.

whereas America was covered with magnificent technical schools Britain did not know what technical education meant in the American sense.[15]

McKenzie, like many of his contemporaries, was also critical of the general state of education in Britain as compared to America. The very nature of the teaching in Britain was faulty. He perceived the British manner of elementary teaching as an endeavour to cram in as many subjects as possible, whereas in America the aim was to teach children to increase their general intellectual capacities. In Britain the co-education of boys and girls existed as a moral issue, while in America education reacted to the desire to raise the intelligence of the entire people. Furthermore, in America a satisfactory system of secondary education existed to bridge the gap between elementary and university education, while in Britain a great gulf was fixed between the two.

The industrial and commercial result of these failures in the British system was that the British workman was not as adaptable as the American workman, and he did not as readily take command of new appliances and machines as his American counterpart. The future for Britain was thus laid out: if it wanted to stop America from taking industries and therefore British international dominance and standard of living, it must prove itself the equal of Americans in education, technical training, and inventiveness.[16] The case was much the same with regards to Germany.

For Scottish industry this had a very practical and detrimental effect. One situation is useful as evidence of this. In 1901 Dr. William Jacks,[17] the head of a large iron company, addressed an audience in Glasgow. He explained that when it came time to replace old machinery with new and improved operations there was no Scottish, indeed no British, company that was up to the task. "It was beyond their skill and appliances. They had not even the tools necessary for the work."[18] The result was that Jacks' company had no alternative but to order the needed work from an American company. He was quick to state that he would have wanted to spend his money in Britain, but that the mechanical appliances of the country were rapidly becoming a standing joke in the United States. In comparison he believed that the Scot clung with sentimental fondness to outdated machinery. As an industrialist Jacks hoped for a great national awakening so the country could compete with foreign rivals.

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[15]Ibid., p. 225.
[16]McKenzie, American Invaders. p. 243.
[17]Dr. Jacks was also an important individual in Glasgow's commercial education schemes. His efforts will be discussed at length in Chapter Three.
[18]"Technology" EN Mar. 23, 1901, p. 205.

As he saw the situation, "In America the mechanic as far excels his fellow in this country as the machinery he guides excels that to which his rival ministers."[19]

So why exactly was Britain not making the grade? Some points have been discussed above, but a more general point could be wrapped-up in the word "efficiency". That Scotland and the whole of Britain lacked 'efficiency' in many matters became the forum for much theory and reform. Various pieces of the puzzle, the mechanism were not fitted together and working properly. This was true in industry, in government, in training, and a variety of other areas. For example, it was often complained that while Britain did not lack genius to reach great discoveries, it did lack the trained practical man able to apply the discovery to the wants of mankind. Thus, the gap between abstract scientist and actual use proved inefficient. The gap between scientific theory and industrial use was in contrast to Germany and America where:[20]

> The skilled chemist...and the skilled engineers...soon made themselves so useful to their employers that their value in the public estimate, and their money value to themselves, rapidly increased; and now the trained scientist is as indispensable in the German and American factory and workshops as the mechanic.

In the educational sphere there was also seen to be a gap between the different levels of education, and an inefficient use of minds as many of the working class were shut off from higher education; or at least from quality and useful higher education. There was also seen to be an inefficient use of government resources. For many this was the core problem facing the country.

For a short time the coupling of these several factors, along with disclosures regarding the Boer War, anxiety over the Empire, and the apparently more efficient foreign rivals, gave rise to a movement in support of government intervention to improve "National Efficiency." This drive united a motley collection of politicians, humanitarians, and theorists, such as Sidney and Beatrice Webb, Lord Rosebery, and the Scottish MP and educationalist Richard Burdon Haldane, who advocated efficiency in all matters for the greater good of the country. This drive for "National Efficiency" was caused by several factors, but paramount among them was a pessimism concerning Britain's political and commercial future, a belief that Britain was being outpaced in productivity and welfare levels, coupled with a "consciousness of guilt" raised by a new awareness of the problems of poverty and urbanization.[21]

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[19]Ibid., p. 206.

[20]"How Britain May Regain Her Manufacturing Supremacy" (From a lecture by Mr. J.B. Hannay), EN Apr. 20, 1901, p. 279.

[21]Belchem, J. Class, Party and the Political System in Britain, 1867-1914. (Oxford, 1990). pp. 44-45.

It has been said that the term "National Efficiency" held much the same meaning as "national economic development" does for the modern nation-state.[22] This precept has much legitimacy as some attribute the movement to an "attempt to discredit the habits, beliefs and institutions that put the British at a handicap in their competition with foreigners."[23] However, the National Efficiency movement might have been best described as the social and political theory that all sectors of government and society must be working in harmonious efficiency in order for the country to flourish and prosper. While government efficiency today might be equated with the cutting of bureaucratic waste, during this period the emphasis was on programmes and policies that efficiently achieved a definite goal, created a long-term effect, and spent finances in a wise and efficient manner. Therefore, implicit to the strategy of National Efficiency was government acting in a progressive and active manner.

A great many reforms and governmental policies were justified under the rubric, often vague, of efficiency of the nation; and the theory spread across party lines and a long period of years. The term first began to appear in earnest in the mid-1890s and as late as 1913 Lloyd George employed the policy to justify increased state expenditures in his budget on education, grants in aid, old age pensions, labour exchange, and health and unemployment insurance. He said the expenses were "not an extravagance but a real economy--an economy of time, strength, nerve and brain...It undoubtedly increases the efficiency of the nation."[24]

When it came to economic efficiency many in Britain sought to emulate Germany, which now played the dual role of model and enemy: a state that could only be defeated commercially through an adoption of her own methods and institutions. Germany's material achievements have already been shown, and for all of Britain's previous boasting of "personal liberty" it could not match Germany's growth in older industries and expanding "science-based" industries.[25]

However, the concept breached the confines of economics as advocates felt there was a connection between educational and social reform, economic performance, and the general quality of life. Germany was not simply revered for its economic laurels, but also for its highly organized and rationally structured educational system,

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[22]Kang, Hee-Chun, "Equality of Educational Opportunity: Ideas and Politics, 1900-1918" British Journal of Educational Studies. Vol. XXXII, No. 1. Feb. 1984. pp. 58-75, 59.

[23]Searle, National Efficiency. p. 54.

[24]Belchem, Class, Party. p. 50.

[25]It should also be noted that for a time Japan was equally held as a model of efficiency. However, as of 1902 Britain and Japan became closer allies and, therefore, Japan could be admired without the shudder of apprehension that Germany provoked. Japan was especially praised for its "self-reliant self-sacrifice." See generally, Stead, A. Great Japan: A Study of National Efficiency. (1905) p.131.

and the links between industry and educational institutions. In addition, issues such as temperance, and housing and tariff reform were added to the British view of efficiency until its goal was defined by Lord Rosebery in Glasgow, on March 10, 1902 as "a condition of national fitness equal to the demands of our Empire--administrative, parliamentary, commercial, educational, physical, moral, naval, and military fitness--so that we should make the best of our admirable raw material."[26] There was not, however, uniformity as to how these goals were to be accomplished. There was some agreement that the piecemeal reform, and gradual removal of some injustices and governmental weakness of years past would no longer suffice. A new urgency was brought to the matter of reform as concern with organization and with eliminating all elements of waste gained momentum.[27]

By the end of the 19th century it was the government that was looked to as the engine for the desired changes as politicians and theorists abandoned their once unquestioned belief in laissez-faire and individualism. In 1899 Bosanquet stated, "The Nation-State is the widest organization which has the common experience necessary to found a common life."[28] Thus, government itself had to pioneer the cause of efficiency by example, and action on many fronts. Laissez-faire individualism was no longer a guarantee. Social harmony and economic improvement was to be underwritten by "limited collectivism, intervention sufficient to ensure distributive justice for the working class while preserving free trade and the continuance of capitalism."[29]

Lord Rosebery and others called for a political party of National Efficiency whose platform would include the removal of slums, elimination of inefficiency in government, destruction of the sweated trades, poor law reform, housing reform, educational reform, the advocacy of sanitary improvements and a "National Minimum" standard of life. All felt that girding industry for foreign competition and recapturing Britain's commercial supremacy was necessary.

Thus, National Efficiency was not a homogeneous political ideology, but rather a convenient label under which a complex set of beliefs, assumptions, and demands for change could be grouped. However, for many theorists education was the central focus. In line with Rosebery's assertions in Glasgow it was felt that the foundation of any movement towards national efficiency had to be a supply of first-rate men; the raw material of which Rosebery spoke. In 1903 Professor Henry E.

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[26]Semmel, Imperialism and Social Reform. p. 63.
[27]See generally, Searle, National Efficiency. pp. 59-60.
[28]Simon, Brian. Education and the Labour Movement. (London, 1965), p. 169
[29]Belchem, Class, Party. p. 45.

Armstrong summed up this position by observing that the one raw material Britain did not lack was brains and that the full energies of the country should be directed at "the manufacture of brains into a highly finished and efficient product."[30] This renaissance in education had to occur at all levels: elementary, secondary, and university. Increased expenditure on education was justified on grounds of efficiency. It was argued that there was no better investment of public money, because for every pound spent two or three pounds would come back from the closing of poor-houses and prisons. Education, therefore, was for the good of the country as well as the individual.[31]

The advocates of efficiency proposed that if Scotland, and Britain as a whole, did not revamp its educational infrastructure it would lose first its industrial supremacy, then the majority of its foreign trade, and "finally sink exhausted to the rank of an impoverished third-rate power."[32] Thus, while National Efficiency proponents often linked education with social improvement,[33] the more obvious and emphasized link was between education and what can be termed "industrial and commercial efficiency." The corollary for social concerns was that if economic strength, and thus opportunity remained strong, social ills could and would be whittled down.

Reform was directed at all sectors of education. There should be a closer connection between all levels of education, as well as closer ties between the educational institutions, industry, and commercial concerns. Secondary education, technical instruction, commercial training as well as science teaching and research had to be reorganized and given greater priority. Here again the cue was certainly drawn from Germany whose highly structured and inter-related system of education and training was, as was mentioned earlier, much admired.

However, as was typical of those advocating reform and efficiency, there was no uniformity of thought as to how this was to be best accomplished. While many individuals were advocating higher levels of education for all citizens, others such as Joseph Chamberlain countered that "national progress of every kind depends upon

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[30]Armstrong, "The Reign of the Engineer" Quarterly Review. Oct. 1903, Vol. 198. p. 464.

[31]See generally, "EIS Annual Congress" (From an address by Mr. George K. Smith, Dundee School Board), EN Jan. 12, 1901, pp. 28-31, 44-46. Morgan, A. Education and Social Progress. (London, 1916).

[32]Searle, National Efficiency. p. 74.

[33]Leading this school of thought was the Scot Alexander Morgan, the head of the Training College in Edinburgh, who focused much of his attention on crime, poverty and other social ills. He wrote: "One of the chief hopes of the progress of society in the future lies in repairing the acknowledged defects in our educational system, and so increasing its power as a lever in raising the sunken and struggling part of our population, who are at once a discredit and a source of weakness to our social order." Morgan, Education and Social Progress. p. 53.

certain individuals rather than upon the mass."[34] Furthermore, enthusiasm for expanded technical education, higher commercial studies, and research coincided with a movement against any instruction of a narrowly utilitarian kind and against premature specialization. In 1901 John Davidson wrote that Scottish reformers had lost sight of the fact that the highest attainment of education was "learning for learning's sake". He further pointed out that for all the regard given to German and American education Britain did not grow great with a German system nor under the 'modern' system. He concluded by asking "Shall a man live on bread and butter? Shall a Nation?"[35]

However, prominent Scottish thinkers such as Alexander Darroch staunchly supported education as a means to a definable end. Invoking the basic nature of humankind and God to support his view Darroch wrote:[36]

> It has been urged that the place of knowledge in the pragmatic scheme reduces the intellect of man to the function of a mere instrument for the adaptation of means to ends, and the underlying assumption is, that by so doing, we place the human intellect in the category of mere mechanical contrivances. But there is nothing derogatory in our human intellect being merely instrumental, since it is the instrument which has contrived all other human instruments, and moreover, and with all due respect, the intellect of God, if He is active at all in this world's affairs, must also work by the adaption {sic.} of means to secure ends.

The majority in Scotland would seem to side with the view that education should provide equality of opportunity for all no matter their social rank, and that education should be more modern; i.e. it should be focused on some clear objective end and reflect the changes in the world. Rosebery, encapsulated this position when he wrote, "Some of our finest schools are content to turn out lads of admirable character and temper, I admit, but equipped for the keen competition of our modern world with a thin varnish of dead languages."[37]

It was perceived by the end of the 19th century that the 20th century would be a "period of keen, intelligent, almost fierce, international competition, more probably in the arts of peace even than in the arts of war."[38] In the coming competitive century it was believed education would have to play a more prominent role. And while it

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[34]Searle, National Efficiency. p. 78. [It must be pointed out that this view was not strongly held in Scotland where a tradition of elite education had never flowered. Most Scots believed firmly in the former goal.]

[35]"Educational Shoddy" Davidson, J. EN Dec. 7, 1901, p. 872. (From a paper read at the meeting of the Glasgow branch of the EIS, Nov. 16.)

[36]Darroch, A. Education and the New Utilitarianism; and Other Educational Essays. (London, 1914), p. 12.

[37]Searle, National Efficiency. p. 76.

[38]Ibid., p. 40.

could be argued that Scotland compared favourably with other countries in lower and intermediate instruction, they had no institutions that could compare to the German Technical High Schools where technology studies were taught at a university level.[39] The practicality of education was thus tied directly to the issue of efficiency, for Scotland could no longer afford to release pupils from school ill-prepared to contribute to the new industries they faced.

It was written of Scottish pupils in 1898: "They have nothing but 'culture' to show for their years of study; and that is a commodity for which there is no market."[40] The manufacturer was forced to send his son, whom he hoped would be his successor, to wrestle for years with Latin and Greek in the hope that the mental exercise would somehow prepare him for dyeing, weaving, or other industrial work. Indeed, it was often said that in Scotland it was "a deadly educational sin to learn anything useful in school."[41] For many reformers the emphasis placed on these ancient languages and adherence to the the tradition of "general studies" symbolized how out of step the Scottish curriculum was to the changing needs of the nation:[42]

> What this country does, it does well. If its teachers stupidly adhere to whatever has the stamp of antiquity, they do it thoroughly...the schools as persistently as ever train embryo manufacturers on Latin and Greek...It is a sin against all pedagogic canons in this country to teach young people anything bearing directly on their destined life-work.

The debate during these years over the relevance and position of traditional studies in classics, Latin, and Greek provides a good example of the manifestation of the theory of national efficiency in the educational arena. In 1900 Mr. Harrison, then Chairman of the Edinburgh Chamber of Commerce, addressed a EIS conference stating that the aim of educators should be to lay a good foundation of general knowledge in the minds of those destined for commercial pursuits. But with regards to ancient versus modern languages he stated: "it is surely as absurd as it is reprehensible to make Latin the chief study of the boy who is destined to spend his life in buying and selling articles of commerce in France or Germany."[43] The Merchant Company of Edinburgh supported this position and stated that the lack of Scottish boys trained in German and French meant that often foreign clerks were hired in the largest houses to conduct foreign business because of their superior knowledge of

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[39]Ibid., pp.73-74.
[40]"Too Much Education" EN Feb. 12, 1898, p. 117.
[41]Ibid.
[42]"How The Germans Do It" EN July 2, 1898, Vol. XXIII, pp. 447-448, 448.
[43]"A Commercial Education" EN Jan. 27, 1900, p. 69.

English, and German or French.[44] Thus, this inefficiency had clearly definable results as expressed by Scottish businessmen, not simply academics and theorists.

The modern versus ancient language debate was not confined to the merchants of Edinburgh. In 1901 a deputation appeared before the Glasgow Chamber of Commerce to complain about the state of modern languages in the schools. It was noted that the university bursary system appointed twice the number of marks for Latin and Greek than for modern languages such as French and German. The result was that if a student wished to have a chance of placing high on the bursary list he would almost be forced to Latin and/or Greek and forgo instruction in the modern languages. The hope was that the Chamber of Commerce would express their views on the importance of modern languages and bring their influence to bear on the various University Courts in Scotland and upon the University Committee of the Privy Council to bring about more equal marking.[45] A similar state of affairs was present in Edinburgh where pressure was coming to bear on the University of Edinburgh to assign equal value in bursary competitions to ancient and modern languages. There the plan was for committees to try to induce the patrons of certain bursaries to adopt equal status.[46] In addition, a Joint Committee on Secondary Education sent a notice to the University Court of Edinburgh stating that the standard of attainment and the standard of marks should be the same for modern as for ancient languages.[47]

This very brief look at the debate over languages demonstrates that the questions confronting those who wished to reform Scottish education were not simple and one-dimensional. The need to direct the curriculum away from the classics was central to the issue of industrial and economic efficiency. To do otherwise would be wasteful. It wasted the time of the students engaged in the study of the languages and it was inefficient as it failed to meet the changing needs of industry and commerce. Critics also duly noted that much of the Latin or Greek that was learned was soon forgotten from lack of use. Thus, the case against Latin and Greek seemed to be clear by the turn of the century.[48]

However, the debate over languages illustrated another element of the reform initiative. Many reformers believed that in order for reform to take place effectively at the secondary, and even elementary level, the impetus had to come from the top-down. In other words, the universities should take the lead. As circumstances stood the opposite was taking place, and changes in many areas during this time were being

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[44]"Commercial Education" EN Oct. 20, 1900, p. 722.

[45]See generally, "Glasgow Chamber of Commerce" EN March 2, 1901, pp. 153-154.

[46]See generally, "Scotland, Modern Languages Bursary Competitions" EN March, 9, 1901, p. 178.

[47]See generally, "Scotland, Joint Committee on Secondary Education" EN March 2, 1901, p. 163.

[48]"The Old Question Up Again" EN Jan. 19, 1901, pp. 58.

directed from the bottom of the educational system upwards. This, in and of itself, was an inefficient means of achieving change. It was quite observed that should the Scottish universities take the lead the schools would be forced to follow.

Furthermore, this debate demonstrated the whole issue of the role of Scottish universities in the drive for more modern and competitive education. Critics rightly noted that the universities had to go past Latin and Greek. Should they hold fast to their role as providers of culture they should equally acknowledge the reality that "culture embraces the whole of human life, and the object of it is to teach men how they shall get the truest pleasure out of life and fit them for their duty in the world."[49] Many individuals who were keen for reform and greater efficiency felt the universities had to let go of the narrow "cultural" role they had long played, and in this regard they meant more than the issue of ancient languages. Indeed, before the new century had dawned many had noted that the increased competition, and changing nature of business and industry required that universities relinquish their attachment to endowing culture to students, not only through the classics, but also through such other "traditional" disciplines such as literature. One writer put what may have been the extreme view:[50]

> The present-day world has a good deal more to occupy its attention than the weighing of words and the balancing of phrases - aye, even than the study of the great thoughts of the great men of the past...how long would the progress of modern civilisation continue if literature were the main pursuit of mankind? Literature, in reality, is but the embellishment of modern life, whose vital forces came almost exclusively through the influence of science.

Lord Balfour of Burleigh, articulated that a "modern university" had to deal with all aspects of commercial relations and the development of manufacturing. He concluded: "Being a commercial people, our Universities cannot ignore science in any of its branches."[51] It was with this in mind that the SED pressed its development and reform of "Central Institutions" discussed in Chapter 7.

The ideology of National Efficiency, therefore, had a complex ancestry and manifestation by the beginning of the 20th century. Though the ideas and beliefs from which it was formed were varied and disparate, they were connected by a common alarm felt about Britain's declining role as a great power. The alarm had first been felt in the 19th century, and had slowly and steadily grown until it bloomed as the 20th century dawned on the British Empire. One Scotsman may have summed up the

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[49]"The Ancient Classics" EN Nov. 9, 1901, p. 798.
[50]"Lop-sided Education" EN Oct. 14, 1899, p. 710.
[51]"The Ancient Classics", p. 798.

prevailing view of the age. James Anderson of J.G. Thomson & Coy Wine Merchants of Leith, testified before a committee on commercial education:[52]

> Our great economic prosperity has rendered us careless..There can be no doubt that the awakening of this new interest is due to the strides which Germany and America have made in the race for commercial and industrial supremacy.

Although many aspects of the national efficiency program, such as tariff reform, were to become the battle cry of a major political party, the advocacy of a more modern curriculum, a better system of technical education, closer links between education and industry, and commercial education reform, was to remain the province of a few informed educators, engineers, industrialists, and scientists. For them such things as tariff reform were but another example of British manufacturers looking to external causes for their difficulties instead of searching to solve their own inadequacies.

Thus, by the end of the 19th century it was a firm belief among the group described above that in the coming competitive century education would have to play a more prominent role. Alexander Morgan may have best summed up the prevailing mood of those that believed in the cause of education when he wrote in 1899: "In the race of nations, we can no more afford to ignore the progress of other countries in educational matters than we can afford to disregard their progress...in industrial and commercial enterprise."[53]

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[52]"Report by Joint Sub-Committee on Commercial Education" Edinburgh Merchant Company, Edinburgh and Leith Chambers of Commerce, (Edinburgh, 1901), p. 16.

[53]"On the Training of Primary and Secondary Teachers in Germany" (Part I), Morgan, A. EN May 13, 1899, p. 329.

Chapter Two: Legislation and SED Policy Towards the Non-University Student

> "my work is hopeless, for education should aim at bringing a new generation that will be better than the old. The present system is to produce the same kind of man as we see today."[54]

Part I: Introduction

In many ways the policies of the Scotch Education Department during the years under consideration were directed against just the description of Scottish education made in the above quote by the radical educationalist A. S. Neill. Its general policies can be described as follows: to build a more coherent system of education, to increase levels of attendance, to extend the period of schooling, and to work toward a specialisation of educational resources. While these three over-arching objectives are important aspects of educational reform to consider in regards to the non-university bound student, there are three specific reforms that are paramount. These are the Education (Scotland) Act of 1901, the development of Supplementary Courses, and Higher Grade Schools.

The SED's immediate goal was to put in place a structure to provide courses and instruction believed necessary to deliver trained individuals to industrial and commercial employers in an efficient manner. It was accepted that this type of student was not going to go to one of the Scottish Universities. While it was hoped that a proportion of them would continue to the highest level of practical education available to them at one of the Central Institutions (discussed in Chapter 7), it was equally recognised that most would leave formal education at a fairly early age.

Thus, the challenge that presented itself to the SED was threefold. First, to extend the years of education as much as feasibly possible in a structured and efficient manner. Second, to provide a degree of secondary education to students not destined for a proper secondary school. Finally, to attempt to include at least a degree of specialization that would better prepare these pupils for their life's work; particularly in industry or commerce. All of this had to be done within the constriction of budgets and governmental controls.

Much of what was to be accomplished can be credited to Sir Henry Craik the head of the Scotch Education Department, which had become a separate entity after the Education (Scotland) Act of 1872. Craik held the Secretaryship of the Department from 1885 until his retirement in 1904. He was succeeded by Sir John Struthers, who had served as assistant secretary under Craik from 1900 until 1904. Struthers served

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[54]Neill, A. S. A Dominie's Log. (London, 1916), p. 12.

as the SED's head for almost as long, stepping aside in 1922. Despite the budgetary restrictions and lack of major Scottish education legislation after 1872 this duo was able to craft a great deal of educational policy. This was done mostly through creative uses of the School Code, and SED circulars.

A fine example of this was the creation of 'certificates' to act as diplomas guaranteeing the successful completion of different levels of education. The Leaving Certificate (LC) devised in 1888 was to be such for secondary education in Scotland. The LC was introduced with a firm educational objective: to strengthen the position and increase the prestige of secondary education and secondary schools in Scotland. This goal was coupled with the need to make secondary education more attractive to pupils in order to encourage them to undertake and complete a full course of secondary study.

Using his position Craik limited the LC examinations only to those schools with a distinct secondary course. The underlying reason was that opening the LC to all schools would work against its prime objective: raising the standing of distinctly secondary education in Scotland. However, there was a second crucial, possibly more important, reason for this decision. Craik was acutely aware that in order for the LC to be successful the Scottish Universities and professional bodies had to recognise it in lieu of their own examinations. In order to achieve this Craik and the SED consulted with many universities and professional bodies beginning in 1887. These included the Pharmaceutical Society of Great Britain, the Edinburgh Society of Accountants, the Law Agents, and the General Medical Council, as well as many universities.[55]

While not of great importance to the "industrial classes", the introduction of the LC provides a useful example of the ability of Craik and the SED to push forward with their policy objectives in the absence of legislation and within budgetary parameters. In addition, as the LC was the first of several certificates created by the Department it would serve as the blue-print for future ones. Of significance for this study were the Merit Certificate (MC) and the Intermediate Certificate (IC), instituted in that order.

The MC[56] was to be the "Leaving Certificate" of the elementary school, and its award was in recognition of a "sound and thorough training in elementary subjects."[57] The MC's objectives were much the same as those of the LC. It was hoped that the

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[55]See generally, Dobie, T. B. "The Scottish Leaving Certificate, 1888-1908." in Bone, T. R. ed., Studies in the History of Scottish Education. (London, 1967) pp. 136-190.

[56]The MC was originally taken at 12 years old and was necessary to gain entry to the old Advanced Departments. Later during the 1902-03 session the "qualifying examination" replaced the MC at 12, and the MC became the examination at the end of the Supplementary Courses.

[57]"Report of CCES, 1898" PP 1898 XXVIII, p. xxxv.

certificate would raise the standard and prestige of completing a full course of elementary instruction, resulting in more students doing so. In addition, it was instituted to clear up confusion and misconception regarding the Labour Certificate. Prior to the MC many parents believed that the Labour Certificate was evidence of completion of a satisfactory course of elementary studies. After the institution of the MC a clear delineation could be made between the two certificates. The Labour Certificate was "a concession for the benefit of parents in necessitous circumstances" and represented the "minimum amount of attainment with which children in circumstances of pressing necessity may be allowed to leave..." school. In contrast the MC would not be awarded for anything less than "a thorough proficiency in the fundamental [elementary] subjects."[58]

The SED later instituted the Intermediate Certificate. Lacking the definitive objective of the MC, it was initially designed as part of a drive to cease issuing certificates in single subjects and move toward group certificates.[59] Intended as a lower grade of the LC, it was directed primarily at schools which "...although they may be doing valuable work in secondary subjects, are yet unable, from one cause or another, to retain their pupils long enough to enable them to reach the standard of the Leaving Certificate proper."[60] As time progressed the IC was described as the LC of the Higher Grade Schools (discussed below). It acted as testimony that the pupil had successfully concluded a "...well-balanced course of *general* education suitable for the requirements of pupils who leave school at 15 or 16" or for students continuing their education until the age of 17 or 18 but devoting their last year or two to specialised study.[61] Finally, the IC was made a prerequisite of entering upon an approved course of study leading to the LC. The SED would also institute Leaving Certificates for commercial and technical studies in 1902 and 1903, respectively. They will be discussed in detail in Chapters Three and Four.

The case of SED certificates illustrates three issues with regards to departmental policy-making. First and foremost, it was evidence of the amount of reform that could be accomplished through departmental initiative, as well as Craik and the Department's ability to shape the course of Scottish education. Second, it was in line with the overall policy of trying to keep students at school longer. Providing a clear objective, standard to aim for, and reward would hopefully encourage students to remain at school. Finally, it reflected Craik's belief in the virtue of undertaking and

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[58]"Examination For Labour Certificates. Merit Certificate Inspection under Article 10b" Circular 223, PP 1898 XXVIII, pp. 148-149.
[59]"Selection of Circulars." PP 1905 XXIX, p. 257.
[60]"Leaving and Intermediate Certificates." Circ. 340, Jan. 1902. PP 1907 XXIII, p. 988.
[61]"Intermediate Certificates (Revised Conditions)." Circ. 389, PP 1906 XXX, p. 233.

completing courses of instruction, rather than individual subjects. This final point would play a pivotal role in the reform and development of both Continuation Classes and Central Institutions; discussed in later Chapters. Finally, the certificates, particularly the MC, were viewed as guarantees to employers that the individual had completed their elementary study. Craik envisioned an ideal in which most employers would require the MC to start work, thus making it a necessity of working life.

Part II: The Education (Scotland) Act of 1901

The discussion above should not be viewed as suggesting that the SED or other Scottish educational interests were incapable of getting legislation passed to support their interests during this period. Rather, Craik and the SED were able to accomplish a great deal without relying solely on the mechanism of formal legislative action by Parliament. However, in 1901 a defining, if not substantial, piece of legislation was passed. The Education (Scotland) Act of that year was a direct manifestation of SED policy to extend the number of years that pupils spent in formal education.

The most significant measure of the 1901 Act was to extend the required period of attendance from 12 years to 14 years of age in practice. Prior to this time the leaving age was officially 14, but a multitude of easily obtained exemptions resulted in an actual leaving age of 12 years. The Act removed many of these exemptions and, declared it to be "the duty of every parent to provide efficient elementary education in reading, writing, and arithmetic for his children who are between 5 and 14 years of age."[62] It also sought to regulate the employment of children in order to remove the financial benefit for youth to leave school early. The Acts forbode outright the employment of any child under the age of 12, and limited the employment of children between 12 and 14 years. Between these ages employment was forbidden unless the child had received a formal exemption from school attendance by the School Board or district authorities.[63]

This final point gave individual School Boards a good deal of authority. If after due inquiry an exemption seemed to be justified, it could grant one to individual children over 12 years of age. The exemption could be modified as to amount of time, and the Board could make the exemption conditional upon further attendance at continuation school. Normally this was until the child turned 14 years of age, but it was within the province of board authority to determine the time and manner of

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[62]"The Education (Scotland) Act 1901." Sec. 1, 1 Edward VII, Chapter 9. Reprinted in Graham, J. E. ed., Manual of Education Acts. (London, 1902), p. 157.
[63]Ibid., Sec. 2, pp. 157-158.

attendance. In turn they were required to record the names of all children given exemptions, along with the circumstances and conditions for each case.

The SED, however, had not relinquished complete control to the School Boards. It retained power to review exceptions. If after a review the SED found that the exemption had been unjustified, that the attendance of scholars were unsatisfactory, or that the conditions were insufficient it could call upon the School Board to recall the exemption, or to take steps to improve attendance in the district. If the School Board did not respond within a reasonable time the SED could withhold or reduce the Parliamentary grant to the Board.[64]

Many educationalists, including members of the influential teachers union the Educational Institute of Scotland (EIS), were far from enthusiastic about the mandatory further education of children between 12 and 14. At a meeting of the EIS Committee of Management J. Young of Biggar admitted that there were indeed a great many pupils in school between the ages of 12 and 14 who formerly left earlier, but he disputed the benefits. Young stated that they added to the strain of teachers, and distracted them from students more suited to higher work. He further told the Committee:[65]

> These children were a difficulty to teachers. They were not the class of children who cared very much to [sic] work. Many of them were not very capable of higher work, and they did not take to the abstract education of the common school, nor did their parents regard it with favour. The committee was proposing to demolish the education given by the Department to children between the ages of 13 and 14.

However, the EIS never succeeded in any move to remove the mandate for further education between the ages of 12 and 14. As the years went by the new law of attendance until 14 seemed to have had the result the SED desired. Attendance statistics on the eve of the 1908 Act showed that the proportion of children not staying on in some type of education until the age of 14 to be quite small. Thus, the immediate impact of the Act was to thrust upon the Scottish school system a large group of pupils remaining in school until the age of 14. By and large, these students were not truly suited to traditional secondary education, and the number that chose to pursue work at a secondary school was negligible. In addition, students exempted at 12 on the condition that they pursue additional schooling until the age of 14 had to be accommodated.

This latter group, colloquially known as "exempts" poised an unique problem for school authorities. They often resisted being forced to continue to attend classes,

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[64]Ibid., Sec. 3, pp. 158-159.

[65]"The EIS, General Committee of Management" EN Jun. 27 1903, p. 483-84.

and formed a notoriously disruptive element when they did attend. Many appeared at continuation classes after a long day of work in such a weary condition that imparting knowledge to them was at best a challenge. Typically leaving as soon as they reached the age of 14, "exempts" flooded the Continuation Class system (discussed in Chapter 5 & 6) proving to be a disciplinary problem as well as an educational challenge.

Thus, the provisions of the 1901 Act created two challenges for the SED. First, to put in place a mechanism to accommodate children ill-suited to, and often poorly prepared for, secondary studies for at least two more years. Ideally, it would take them past purely elementary work or revision of work they had previously undertaken. Second, to adapt a struggling Continuation Class system to the influx of "exempts", and at the same time monitor the manner in which nearly 1000 School Boards exercised their power to relieve students of their obligation to attend day classes.

Part III: Supplementary Courses--Extending Elementary Instruction.

Internal communications of the SED show that its officials were more or less at a loss as to how to react to the circumstances described above that confronted them after the passage of the 1901 Act. The year after passage they were still searching for an appropriate response to the new influx of students. In 1902 a long memorandum drafted by William Smith, an SED official, was given to Assistant Secretary Struthers and then to SED Head Craik. Entitled "Memorandum on the Further Instruction of Pupils Who Have Obtained the Merit Certificate in Elementary School" it outlined a variety of suggestions for pupils who had completed the elementary course, but were still required to stay on at school until the age of 14 under the provisions of the 1901 Act. It also revealed some of the policies underlying the institution of supplementary courses.[66]

An immediate problem was the lack of teachers especially in country districts to work with these pupils. In many cases the elementary schools did not have teachers specially trained to carry education beyond the elementary stages. It was therefore noted that most of the students would have to be "lumped" into the Senior Division, or alternatively work on their own without much direct supervision from a teacher. It was suggested in the SED memorandum that unless some special inducement was given, such as the old payment for Specific Subjects (which had been done away with several years before) the students would suffer. Otherwise, teachers who viewed their jobs as solely the preparation of students for the Merit Certificate would be strongly

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[66]"Memorandum on the Further Instruction of Pupils Who Have Obtained the Merit Certificate in Elementary School" Part I, Smith, W. SRO, ED 7 1/21.

tempted to pass the new group of students "through the mill again", and the two additional years of school would hold little additional benefit. This was a situation the SED wanted to avoid at all costs. Yet, Craik had abhorred the unpopular payment scheme of Specific Subjects, and had worked to have it and the Specific Subjects (which had been viewed as being of questionable educational benefit) done away with.[67]

However, the SED was still in a quandary as to what type of education should take place in the additional years. If not additional elementary work or revision of previous studies, then what? The old Specific Subjects were deemed unsuitable, and the matter was further complicated by the fact that there was no clear consensus on whether or not to begin specialized, practical training at this point. The SED was secure in the opinion that the subjects of instruction should "be determined chiefly by a consideration of what these pupils chiefly need."[68] However, it was equally clear that these students would not be pursuing a regular course of secondary or higher education. Such students should be transferred to higher schools or secondary schools as soon as they were awarded the Merit Certificate. The precarious position of the remaining students in the Scottish education system was summed up as follows:[69]

> The pupils now to be considered are simply those who having obtained the Merit Certificate before they are 14, are obliged by the Act of 1901 to remain at school until they reach that age. These pupils are not going into professions, nor even as a rule into offices. The boys will become ploughmen, crafters, farmers, artisans. The girls will go into shops or factories, or into domestic service.....They are by no means duffers, and will not generally become mere drudges. We have to consider the future mason, not the mason's labourer.

Finally, the subjects to be taught had to be done in a very short time. On average it did not exceed a year, as pupils who achieved the Merit Certificate by the age or 12 were often considered subjects for a secondary school. Yet it was hoped they "might spend the last year in school more profitably than in learning fifteen propositions of Euclid or Latin to the end of the regular verbs."[70] While the SED came to no final decisions at this point, the conclusion seemed to be that while the old subjects of the elementary curriculum should continue to form the staple of the instruction an attempt should be made to give the subjects "a new and interesting turn,

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[67]Ibid.
[68]Ibid.
[69]Ibid.
[70]Ibid.

by presenting them in new aspects and by encouraging the method of individual study."[71]

This could hardly be considered conclusive, and it revealed that the extension of the leaving age to 14 years by the Act of 1901 was premature and even unwarranted. Even though the SED had long advocated pupils staying on longer at school, when the Act was passed they were at a loss as to what to do with these students. Two years after the Act was passed into law, officials of the SED and Scottish educationalists were still publicly asking what was to be done during this time. At a ceremony in 1903 the Secretary for Scotland, Lord Balfour of Burleigh, summed up the situation in the following manner:[72]

> The problem which I think is agitating the mind of Scottish educationalists at the moment more than any other is how to make those additional months or years more practically useful to the pupils who spend them at school.

Indeed it was not until the year of Lord Balfour's remarks that the new "Supplementary Courses" were put on secure and definitive footing with the issuing of Circular 374 in February of 1903, and shortly thereafter in Article 21 and Schedules V & VI of the School Code. It recognised that an expanded set of courses would not be feasible in all schools, and left open the option of using the time available exclusively for the revision of previously completed elementary work. However, the circular clearly discouraged this approach.[73]

The SED also discouraged the use of the extra time for a foray into secondary subjects. It was considered that to do so was such a departure from previous work and preparation that it could not have any practical benefit. Nor could the elementary school effectively work in this area. Curiously, even if the child desired to go to a secondary school in the interim the SED openly discouraged it as a waste of the short time available. Lord Balfour criticised Craik and the SED for this position. He stated that they had apparently never taken into account that the student might be suited to the study and thus decide to stay on longer.[74]

Any student suited to secondary course work should be transferred as early as possible, preferably before the age of 12, to an appropriate school. In an attempt to foster the transfer of qualified students, the SED decided that the fitness of the student

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[71]Ibid.

[72]"Lord Balfour of Burleigh at Leith; Inauguration of Nautical College. Important Announcement on Elementary Education." Scotsman. Feb. 5th, 1903. SRO ED 7 1/21, Part I.

[73]"Report of CCES, 1903" PP 1903 XXII, pp. 14-15; "Suggestions For Supplementary Courses in Day Schools." Circular 374, PP 1903 XXII, p. 288; Scotch Code of 1903, PP 1903 XXII, pp. 202-203.

[74]"Lord Balfour of Burleigh at Leith." Scotsman. Feb. 5th, 1903.

for higher studies would no longer be determined by a single examination. Rather, the "whole character" of the pupil's preceding school work, especially in the six months prior to transfer should be considered. The responsibility fell first on the Headmaster of the school to report the attainments of the candidate to the school Inspector. Thereafter, the inspector held the final decision.[75]

For those that remained at the elementary school the Supplementary Courses were to be elementary in nature. However, the new courses were also designed to give a fresh perspective to previously completed work, and put at the fore "the practical requirements of the pupils' after-school life."[76] With this in mind the SED recommended four different courses for supplementary work, each designed for a different line of work. These included a "Course for Rural Schools" for preparation for rural life and a "Household Management Course" to prepare girls for domestic duties. Most important in the context of this study were the "Commercial Course" and the "Industrial Course." The first was designed to prepare pupils for commercial pursuits, and the latter for manual occupations and trades.[77]

Despite their names both courses were essentially elementary in nature. For example, the industrial course had very little to do with actual "industry." The essential object of the course was to give to the pupils a basic knowledge of Geometry and Mensuration, including the drawing and measuring of figures using instruments such as protractors and compasses. Beyond this the course aimed to familiarise pupils with decimal operations, the metric system, and provide practice in money calculations. The most advanced work entailed "simple principles of Mechanics". Manual instruction was included in the form of workshop practice in such areas as woodwork and ironwork. Workshop instruction embraced elementary topics such as the proper use of tools and drawing objects to be constructed. However, the distinguishing features of the industrial course were Arithmetic and Mathematics presented to the pupil using concrete problems, and not mathematical theory.[78]

The content of the Commercial Course was similar in some respects to the Industrial Course. The SED recommended that the main object of the course should be the principles of Arithmetic and the making of calculations, based again on concrete examples. It also provided for practice with money calculations and the decimal system. However, the Commercial Course also introduced the student to the basic

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[75]"CCES Report" PP 1903 XXII, p. 15.
[76]Circular 374, PP 1903 XXII, p. 287.
[77]Ibid. p. 288. The proposed courses can be found in Appendix A.
[78]Ibid., p. 295.

principles of shorthand, book-keeping, commercial documents (invoices, receipts, cheques, etc.), and provided for systematic exercises in handwriting.[79]

Much as the SED was to do with Continuation Classes, co-operation between schools was encouraged. It was said to be neither in the interests "of economy nor of efficiency" to have several schools serving the same district trying to provide all of the proposed courses. Rather, a division of labour was encouraged whereby each school in the district would offer one of the courses, and students could freely change between schools. It was, however, recognised that this type of organisation would probably only be practical in larger cities.[80]

Though these courses were clearly in line with the ideals of industrial and commercial efficiency, they were not designed to constitute a student's commercial or technical education. First and foremost, they were merely suggestions for possible curriculums to be followed in a Supplementary Course. School managers were free to ignore them and use the extra years simply for revision of elementary work. Second, even if adopted the courses were to be of a elementary nature. Finally, Supplementary Courses were deemed to have a higher purpose and objective than the "preparation in the narrow sense for any particular occupation." Rather they should aim at:[81]

> producing the useful citizen, imbued with a sense of responsibility and of obligation towards the society in which he lives. It should render him--so far as the school can do so--fit in body and alert in mind, and should prepare him for the rational enjoyment of his leisure time, as well as fit him for earning his living.

In this regard the study of English was considered of paramount importance, as well as the study of institutions of government and the Empire. To these could be added general studies of value no matter the pupil's final occupation, such as the "proper care of the body, the value of exercise and of pure air, the proper selection of food, the means of preventing the spread of disease, and various other matters." The "distinguishing note" of Supplementary Course work was deemed to be individual study.[82] The supplementary course represented a further departure from the traditional "all-in-one" Scottish Parish School, and an additional separation and distinction between elementary and secondary schooling. Indeed it was declared:[83]

> My Lords are of opinion, from a careful consideration of the facts, that the tendency--not confined to any one class of school--to make one and the same school with one and the

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[79]Ibid., pp. 294-95.
[80]Ibid., p. 292.
[81]Ibid., pp. 288-289.
[82]Ibid., p. 289.
[83]Ibid., p. 287.

> same staff serve many different functions is the weak point of educational organisation in Scotland as compared with that of other countries...and they are satisfied that increasing division of function as between different types of schools is an essential condition of further educational progress.

In 1904 Craik described the ever diversifying scheme of education that the SED had laid before the country to an audience in Kirkwall. Education in Scotland had been divided into three classes: "those [students] whose education must end at a comparatively young age; those who were going to the Universities seeking to be the pioneers and officers...in our commerce and industry; and, third, those who were to be the nursery of our learned professions."[84] Supplementary Courses were designed for the first. However, these courses were not the end of education for this "class" of pupil; the continuation school was still open to them and could be viewed as a secondary school for the working class.[85]

Reaction to the new supplementary courses from the educational establishment of the country was far from positive. The issue was discussed at a meeting of the EIS in 1903 in Edinburgh. Discussion on the topic took the form of a motion from D. M'Gillivray of Glasgow that the institution of Supplementary Courses for children between the ages of 12 and 14 "encouraged premature specialisation" and was contrary "to the recognized educational principle, that specialized instruction, to be really effective, must rest on a solid basis of general education." He further contended that "the current of public opinion had set steadily against the proposals contained in the new Code."[86]

The motion was adopted by the Committee of Management, but that did not resolve the issue. Discussion on the topic revealed a deeper resentment toward Supplementary Courses. There was a perception that they were something foreign being foisted upon Scotland. This clear resentment to them illustrated the desire of those in Scotland to provide a Scottish solution to educational problems. More appropriately, it represented a desire to have a Scottish system of education debated, developed, and determined in Scotland. M'Gillivray stated: "The whole policy of the Department showed the folly of attempting to transplant into the education of one country, the details and principles of the system of education of another country."[87]

It was believed that the principle behind Supplementary Courses had first been introduced from France. There they had the title "Complementary Courses", which

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[84]"Sir Henry Craik at Kirkwall." EN Sep. 7 1904, p. 667.
[85]Ibid.
[86]"The EIS, General Committee of Management." EN Jun. 27 1903, pp. 483-484.
[87]Ibid.

had simply been changed to "Supplementary Courses." No real evidence of the French connection was presented, nor was it explained why the courses were incompatible with the Scottish system. Yet, those in attendance held firm to the conviction that the principles of the Supplementary Courses were "alien to the Scottish system of education, opposed to popular opinion, and against the policy of the Department two years ago."[88]

The argument over Supplementary Courses revealed the division between those trying to introduce some level of specialisation or practical study to the post-elementary phase of education, and those that embraced general education. Though there was objection to them as a 'foreign' method, it can not be said that this represented a wider resistance to the adoption of educational methods from abroad. Indeed, the principle of keeping students on longer at school was influenced by the systems of other nations. H.M.I. Stewart reported that the recognition that it was proper to keep students in school until 14 years of age was a function of the educational progress of other nations where children did stay on longer. Also, many discounted objections on the basis that Supplementary Courses provided specialized instruction. Stewart described the work of the courses as providing for 'definite', not necessarily 'specialized' work.[89]

It appeared clear that any 'import' would have to be consistent with Scottish principles of education. However, if it was commonly recognized that pupils intending to enter a career in business, commerce, or industry left school no later than 14 (see for example the Dundee High School response to commercial subjects in Chapter 3), and that no specialization should occur up to that age, then it was axiomatic that a non-university bound student would not have any opportunity for specialized work. This was the Scottish principle.

Despite objections and the seemingly contrary nature of the courses to the Scottish educational tradition, Supplementary Courses were not to disappear. It can not be said, however, that they were particularly successful in the years immediately after their inception. H.M.I. Scougal's report on Supplementary Courses in 1904 reflected a system bound with flaws. The courses were described as lacking any distinctive character, and courses for girls were declared to be generally unsatisfactory. In addition, there was a shortage of specially qualified teachers. With regards to specific branches of science such as Chemistry and Electricity, it was said that only a few teachers possessed more than an 'amateur acquaintance' with the subjects.[90]

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[88]Ibid.
[89]"Dr. Stewart's Report" PP 1903 XXI, pp. 232-233.
[90]"Scougal's Report for 1904" PP 1905 XXIX, pp. 371-72.

However, Scougal found most schools receptive to at least introducing the classes. Indeed, the major problem facing the courses was not necessarily a lack of centres, but rather a lack of co-operation among schools. This resulted in a waste of teaching power and inefficiency in the course work. The resistance to inter-school co-operation was founded in the departure from Scottish tradition that the classes represented, and emanated from three groups. Teachers objected "illogically" to the transference of their pupils under any circumstances. Similarly, parents presented an obstacle because they saw transferring to another school as breaking the continuity of education, and because they did not want their children to be in attendance at different schools. Finally, the children themselves were averse to leaving the school that they had often known all their lives. All three groups longed for the days of the traditional Scottish all-in-one school, a position that Inspectors were encouraged to oppose "strenuously".[91]

The other significant shortcoming was the disproportionately low number of pupils who actually entered Supplementary Courses early enough to complete a full year of work. This was not, per se, a function of any failure of the Supplementary Courses, but rather of the elementary system. In order to embark on a Supplementary Course a student had to first pass the Qualifying Examination. The new obligation to remain at school until 14 years of age didn't bring with it a corresponding obligation to achieve this level. Therefore, many students simply stayed at school until 14 without ever reaching the level of the Qualifying Exam nor the Merit Certificate, or achieved the Qualifying Exam at such a late stage that they didn't complete a full year in a Supplementary Course.

Scougal maintained that ideally 11% of pupils on the roll each year should reach the Qualifying Examination stage. Statistics showed that in many areas the percentage was barely half of the 'ideal'. For example, in Glasgow only 4.7% reached that level during the 1905 session. Although better, other cities also performed well below the ideal. In Leith the percentage was 5.4%, in Perth 6%, and in Edinburgh it was 6.3%. Though there were a variety of suggested explanations for this poor performance such as late entry into school and irregularity of attendance, Scougal concluded that a great deal could be attributed to poor organization and classification in primary education. One school in Edinburgh had taken it upon themselves to create a separate class with a specially qualified teacher for students who were destined not to reach the qualifying stage. The result was that many of the students were able to rejoin their peers after a period in the special classes. Scougal

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[91]Ibid., p. 372.

was, however, quick to point out that the expense of such a project prohibited it from national application.[92]

As the years went by Supplementary Courses were praised more for the social benefit that they imparted to the Scottish adolescent than any particularly academic success or progress. In 1906 it was noted that Supplementary Courses caused an improvement in the "personal tidiness and manners" of students, especially in the poorer localities and among the girls. This improvement was attributed in the first instance to the fact that the young people in the poorer areas were prior to 1901 rarely at school at the age of 13 or 14. Rather, they were more likely to be found "at work or hanging about the streets" and "demoralized by running wild in the streets, or...physically stunted by hard and premature manual toil."[93] The greatest success seemed to be that the average physique of the generation would be superior to that of their fathers and mothers, and that their appearance and manners had taken a turn for the better. Little mention is made of any concrete educational benefit.

Reports in future years gave the purely educational aspects of Supplementary Courses a decidedly mixed review. In 1907 Scougal along with other inspectors made a full review of the progress and benefit of the courses. Two general conclusions laid waste to the central objective of the SED for Supplementary Courses: that they should provide practical education based on individual study. The consensus of the Inspectors was that the courses did not provide enough of either. H.M.I. Fleming reported:[94]

> Of Supplementary Courses it is regrettable to have to report that little or no progress is being made; in fact, through the dropping out of some Rural Courses, there are actually fewer recognised Supplementary Courses this year than last. So far it may be said that Supplementary Courses...have not been a success.

Despite this poor assessment the actual number of schools offering Supplementary Courses and the average attendance in the courses did rise steadily over the years. In 1903 there were 398 schools with Supplementary Courses. By 1909 that number had risen to 1,899. The number of pupils in average attendance had experienced a similar impressive increase. In 1903 the number stood at 9,713, and in 1909 it had risen to 39,097. There is also some evidence that Supplementary Courses may have helped raise the number of students finishing a Merit Certificate. In Edinburgh attendance at Supplementary Courses rose from 1043 during the 1903-04

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[92]"Scougal's Report for 1905" PP 1906 XXX, pp. 254-55.
[93]"Scougal's Report for 1906" PP 1907 XXIII, pp. 363 & 367.
[94]"Scougal's Report for 1907" PP 1908 XXVII, p. 387.

session to 3149 in the 1912-13 session. During the same time period the number of MCs received rose from a mere 448 to 1441, an increase of over 300%.[95]

While giving recognition to the increase in numbers, reports continued to lament the resistance of school managers to making suitable provision for practical instruction in terms of Schedule VI of the Code.[96] Much of the rise in attendance was, of course, because the Education Act of 1901 compelled pupils to stay at school until 14 years of age. Therefore, a steady increase in numbers in average attendance does not necessarily translate into educational benefit. Despite later reports that there was greater effort to add practical study Supplementary Courses were more likely to be congratulated for imparting to a pupil the rational "employment of his leisure time," rather than his actual employment.[97]

Indeed, the entire role of Supplementary Courses must be called into question. The early desire of the SED was that they provide practical, individual study in the context of one of four systematic and structured courses aimed at the future employment of the pupil. Inspectors almost conclusively reported that they never reached this goal. The principal academic benefits appeared to be keeping more students on to achieve the MC, preventing them from quickly forgetting all previous instruction, and having a civilizing influence on pupils from poorer areas. However, the main effect they seemed to provide was that they countered the evils of "the street", premature employment, and kept adolescents occupied during the years when they were perceived to have the greatest potential for trouble.

The very real benefits, especially for poorer localities, should not be discounted. However, it seems clear that these benefits were more a function of students remaining longer at school in any capacity, rather than specifically completing (or even undertaking) one of the prescribed Supplementary Courses. Therefore, it seems that any benefits, especially social benefits, were more attributable to the reforms imposed by the 1901 Act than by the institution of Supplementary Courses per se.

Part IV: Higher Grade Schools

When dealing with the issues surrounding the development and institution of Higher Grade Schools it must be remembered that at the time "Secondary Education" was viewed as a separate sphere of education. It was not a stage which followed upon completion of an elementary course. Rather, it existed distinctly apart from

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[95]"Report of the Proceedings of the 14th School Board for the City, 1911-14, March 1914" (NLS) p. 16.
[96]"CCES Report, 1910" PP 1911 XXI, p. 15.
[97]"Scougal's Report for 1907" p. 14.

'elementary education', was primarily for the middle-class, and strived toward a perceived higher standard of education. While there was a faction that believed that secondary education should follow on from elementary work for all who wanted to pursue it, this could not be regarded as a majority opinion. Most notably, the SED did not adhere to this view. Rather, it encouraged the position that secondary education was essentially a "different kind of education, where a classical culture was passed on that differentiated a small, strictly-limited elite from the rest."[98]

While Craik and the SED may have embraced the premise that secondary education was not for all, they did not subscribe to the belief that all students could not benefit from some type of "higher", post-elementary schooling. Indeed, as mentioned above, it was a central pillar of SED policy that pupils extend the number of years at school. Supplementary Courses may have been a hastily designed plan to occupy children so they could comply with the new rules of the 1901 Act. In contrast, HGSs reflected a clear Departmental policy, and were not a reactive measure.

The instituting of the HGSs or departments was central to the SEDs desire to provide some type of "secondary" or "higher" education to pupils who traditionally would be outside the secondary school stream, were entering careers that placed a low priority on secondary training, or were considered "unsuited" to higher learning. The term "higher grade school" was adopted from England and had been in use in Scotland since about 1885. It was loosely used to describe schools that built some type of secondary education on top of the elementary instruction given and were within the reach of the lower middle classes. Some cities attempted to develop a central "higher grade" school for pupils from all over the city. However, they long suffered from the stigma of not providing "true" secondary education. It was deemed that the "endowed" and the "higher class" schools (which did not share in the Parliamentary Grant), and the "public" secondary schools (which did share in the grant) provided this.

In 1898 Craik endeavoured to take the Scottish HGS in a new, more practical direction, and enlist it in the SED's drive for education aimed at industrial and commercial ends. In that year, Craik proposed two new schemes for the organisation of HGSs: Higher Grade (Science) Schools and Higher Grade (Commercial) Schools. These schools were aimed at boys "of 15 or 16, who will in after life [sic] for the most part follow industrial or commercial pursuits."[99] Their purpose was stated to be "the further encouragement of instruction in Science...in combination with a sound scheme

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[98]Corr, H. "An Exploration into Scottish Education" in Fraser, W. H. & Morris , R. J. (eds) People and Society in Scotland, Volume II, 1830-1914. (Edinburgh, 1990) pp. 298-299.

[99]"Higher Grade (Science) Schools, Circular 231, Oct. 1898, PP 1899 XXVI, p. 202.

of general education." SED Circular 234 of the same year underlined the practical nature of the instruction to be given. It stated: "no opportunity should be lost of pointing out the bearing of the results obtained on the industries and occupation of everyday life." SED circulars in 1899 also laid out a syllabus for a proposed 3 years instruction in experimental science, with two additional courses for girls and rural areas. And the Scottish Schools Code of 1900 also laid out in detail the curriculum for the schools or departments.[100]

The intent of the SED seemed clear. HGSs were to provide a channel for more practical instruction, be geared to students not suited to traditional secondary education, and help prepare students for their future life's work--particularly in Scottish industry and commerce. In this way they were in line with the theories of National Efficiency, and fulfilled the perceived need for better educated employees for factories and commercial concerns.

However, the Education Act of 1901 had a profound effect upon the focus and composition of the HGSs, and would lead them away from the goal of providing practical scientific, industrial and commercial education. It should not be said that the Higher Grade Schools failed outright. The report for 1901 by H.M.I. Stewart was mixed but generally good. There was at least some signs of success, especially in larger cities:[101]

> In Edinburgh there are two Higher Grade Schools with an approved curriculum for three years, a specially strengthened staff, and premises which, although not satisfactory at present, are to be enlarged or replaced as soon as possible. These schools have been a distinct success. I should be glad to hear that one or two more were to be opened.

The change in character seemed to have occurred as a result of the Act of 1901, rather than any direct Departmental decision that they had failed. Yet, it doomed them from their ordained role in the education of the nation. However, it is clear that from their inception the HGSs were under-utilized, and few students stayed on beyond one year, and even fewer remained for the full 3 year course.

The SED report of 1912 reviewed the progress of the HGSs. At first glance the report shows a steady progress in the number of schools and students. But a closer look at the statistics tells a different story. In 1900 there were 24 HGS which could accommodate 7,740 students. However, there were only 2,832 on the registers and 2,561 in average attendance. There were 1,606 in the first years course, but only 351 stayed on beyond the second year. This trend continued. In 1903 (the year

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[100]See Appendix B.

[101]"Report for the Year 1901, Southern Division" HMI Stewart, PP 1902 XXXIII, p. 702.

before their role was changed) there was accommodation for 10,299 scholars, but only 4,548 in average attendance; and there were 2,663 in the first year course but only 662 staying on beyond the second year. (See Table 2.1 for complete statistics).

As discussed above, a result of the 1901 Act children were to be separated at 12 years of age between those that would receive an extended elementary education and those who could be transferred to a proper secondary school. Those that received the extended elementary education did so through Supplementary Courses. The others went to or were transferred to a HGS or a secondary school. Thus, the admirable goal of supplying a distinctly scientific or commercial education through the HGS was abandoned. Indeed, by 1903 the SED had completely changed its opinion about the purpose of the HGS:[102]

> Hence the courses-predominantly scientific or predominantly commercial-which formerly characterized these departments will, we hope, tend to disappear and be replaced by a course of general education in which the study of English and one or more languages..all specialization on commercial or technical lines being postponed.

Also, despite the initial hope that HGSs would serve students that would stay on until 15 or 16 years of age, they did not. Statistics from 1904 show that of a total enrolment of 10,107 only 1,320 were carrying on beyond the second year. By 1906 of 17, 150 students in the Higher Grade Schools only 3,400 were studying at a level beyond the 2nd year. Table 2.1 shows the progress in number of schools, numbers in enrolment, and those staying on for successive years.

Table 2.1: Statistics on Higher Grade Schools

Year	#of Schools	Accommodation	Average # on Registers	Average Attendance 1st Yr.	2nd Yr.	3rd Yr.	Total
1900	27	7,740	2,832	1,606	604	351	2,561
1901	34	9,721	3,518	1,712	1,053	505	3,270
1902	35	10,103	4,327	2,209	1,006	606	3,821
1903	36	10,299	5,157	2,663	1,223	662	4,548
1904	74	18,965	10,453	6,650	2,137	1,320	10,107
1905	121	28,267	16,291	7,937	4,340	2,231	14,508
1906	137	31,742	19,319	8,664	5,086	3,400	17,150
1907	147	34,242	20,872	8,734	5,719	4,014	18,467
1908	169	36,143	21,839	9,634	6,018	4,280	19,932
1909	182	38,390	23,893	10,243	6,948	4,927	22,118
1910	191	39,487	26,043	10,639	7,603	5,853	24,095
1911	196	40,505	26,349	10,373	7,382	6,328	24,083
1912	194	41,166	25,930	10,197	7,622	6,382	24,201
1913	193	40,922	26,434	10,655	7,563	6,599	24,817

(Source: "CCES Report for 1912-13" Appendix IV. PP 1913, p.47; Statistics for 1913 from CCES Report for 1913-14, PP XXIX, Appendix IV, Table 2, p. 63.)

[102]"CCES Report" PP 1903 XXI, p. 15.

Despite these apparent set-backs the SED was determined to try and meet the nation's scientific, industrial, and commercial education needs. In part this may be why Craik introduced the Commercial and Technical Leaving Certificates (discussed in Chapters 3 and 4). One key point must be made at this juncture in the study: by introducing Leaving Certificates in Technical and Commercial topics the Department moved towards a new avenue to promote specialized topics. No longer was it directed at those pupils who were assumed to end their education at a comparatively early age, but rather it was placed into the secondary arena; which had never been receptive to this type of education. Furthermore, the HGS was also called into service to accommodate the flood of additional students staying in the system after the 1901 Act. As such, they would adopt a more general educational character.

Part VI: Conclusions

Several conclusions can be made about SED policy with regards to pupils bound for the work-place rather than the university. First, in an attempt to achieve greater efficiency the system of variable grants, unstructured curicula, and standard examinations had been replaced by a system of fixed grants (doing away with payment by results), an organically connected curriculum, and a single comprehensive examination at the end of the whole school course. Under the Act of 1901 the Merit Certificate ceased to be a "certificate of exemption", resulting in most students staying in school for up to two additional years.[103]

The new Supplementary Courses were meant specifically for students who had to remain at school after the Qualifying Examination, but did not desire, require, or qualify for a secondary course of instruction. In short, they were created for a "precise class" of pupils. The courses were designed to consolidate previously acquired knowledge, give such knowledge a practical angle, and prevent the loss of school learning during the years of adolescence. Most importantly they were to lay the foundations of "intelligent work, good citizenship, and rational enjoyment" of leisure time through individual study.[104]

Influenced in part by the foreign examples (especially in terms of keeping students at school longer), Supplementary Courses did conflict with Scottish educational traditions. Instead of supplying a rung of the ladder to the university, they presupposed that the pupil was not destined for university course work. The SED contended that they did not represent a barrier to the much valued Scottish tradition of

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[103]See generally, "A Selection of Circular Letters of the SED, 1898-1904, with Explanatory Memorandum." PP 1905 XXIX, pp. 249-251.
[104]Ibid., p. 251

"the free rise of talent" from the school to the university. Rather, they emphasised that the method for transferring of pupils to a school with a secondary curriculum had been simplified, and their early transfer encouraged. In short, if a pupil wanted to undertake secondary education and continue to the university he should never enrol in Supplementary Courses.[105]

However, the SED did admit that the changes to the educational system in Scotland had, for all practical purposes, meant the death of the Parish School tradition. This was to be welcomed, and was a function of the progress made in education. It was written:[106]

> Owing to the general progress of education and the increasingly high standard of the University Preliminary Examinations, there is no longer the same possibility of direct transference from the parish school to the University as there was a generation ago. Nor, fortunately is there the same necessity for it.

The "same necessity" did still exist in many country districts were no higher school was within reach. There the Parish School continued to have to do all the work, and Supplementary Courses often existed side by side with secondary work. This last bastion of the Parish School tradition was itself a function of necessity rather than preference by the SED. Craik and other SED officials had made it clear that they believed the attempt to have one school perform all educational tasks was one of the great weakness of the Scottish system, not one of its great strengths. The policies followed throughout these years pushed schools toward performing specific functions within the system, and performing them for a specific class of pupils. The specialisation of Scottish schools, in terms of function and pupils, was seen as the road to the future, and the path to providing the best possible and most useful education to the class served by the school.

While the Supplementary Courses did not specifically lose their emphasis on more specialised studies, in practice they did not perform that function. The statistics and reports of Inspectors indicate that their main success was in providing an avenue for students to stay on longer at school who previously would have left at 12 years of age. However, few completed a full Industrial or Commercial Course, though many did use the extra years to complete the Merit Certificate. The question which remains to be answered is whether these were students who would have left at 12 without reaching that level, or whether these students simply took longer to complete the Certificate with the knowledge that they would have to stay on until 14 whether or not

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[105]Ibid., p. 252.
[106]Ibid.

they had finished it. If the former is true, then the Supplementary Courses fulfilled an admirable and needed service to Scottish education. If the latter is the case, then Supplementary Courses simply provided a delaying mechanism.

The role of Higher Grade Schools is harder to define. In their infancy, though they were under-utilized, they retained a distinctly scientific and commercial character. However, after the 1901 Act the SED redirected their efforts towards more general secondary educational goals. Here again the statistics show that few students completed a full course at a HGS. Thus, the question must again be asked whether the HGS simply provided a way for students anxious to leave school to occupy their time before the prescribed age.

Also, as will become even more apparent in the context on Continuation Classes, since the organisation and composition of both HGSs and Supplementary Courses was left in the hand of School Boards those localities with active Boards experienced more growth and success. For example, in Edinburgh since the inception of Supplementary Courses in 1903 they had been carried on in practically all the elementary schools. When it was found that this involved either an excessively large outlay in equipment and staffing, or unsatisfactory results in instruction, the School the Board in 1909 adopted a resolution to establish "Central Schools" in which Supplementary Classes only would be accommodated. The thoroughly equipped and modern Tynecastle School was one of these. Opened in September 1912, it had the supplementary work of six schools transferred to it. Though not as well equipped, Flora Stevenson School became another such Central School, temporarily accommodating the classes of four schools. The centralisation of effort in Edinburgh also occurred at HGSs. By 1914 the system had four schools, Boroughmuir, Broughton, James Gillespie's, and Portobello, with the last two only accommodating Higher Grade Departments.[107]

What also seemed clear is that the crucial element was not Supplementary Courses or HGSs. Rather, it was the Education Act of 1901. It was this act that removed previously existing exemptions from school attendance, and raised the formal leaving age to 14 years. Without this piece of legislation it is questionable whether the Supplementary Courses or the HGSs would have experienced the attendance that they did. Students certainly did stay at school longer. Also, the numbers who required additional education had a profound effect upon the character of both; though this was more profound in the case of HGSs. However, with HGSs adopting a more general educational curriculum, and even the ideal of the Supplementary Courses embracing

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[107]"Report of the 14th Board of the City" pp. 16-17, 22.

only an elementary level of study, the question remained: from where would the much needed technical and commercial education for Scotland come?

Appendix A

Sixth Schedule of the Scotch Code 1903. "Supplementary Courses Under Article 21. [PPXXII 1903, p. 225.]

I. Commercial Course

(1) *Arithmetic*--(a) The principles of Arithmetic studied and exemplified in their application to cases such as actually occur in business transactions.

(b) Training in expertness of calculation and in the use of short methods, including especially practical applications of the decimal systems (*e.g.* calculations in decimal money, rapid and direct expression of British money in decimals of £1, etc.)

(2) *Bookkeeping*--The principles of Bookkeeping, illustrated by the keeping of accounts in simple form.

(3) *Common Commercial Documents* (such as Invoices, Accounts, Receipts, Cheques, etc.): their purpose and proper form.

(4) *Handwriting*--Systematic practice to secure *speed* in combination with legibility and correctness of form.

(5) *Shorthand* (optional).

II Industrial Course

(1) *Geometry and Mensuration*--(a) Construction and measurement of figures drawn to scale by the use of compasses, protractors, set squares, etc.

(b) Construction and use of graphs;

(c) For advanced pupils, mensuration of regular solids

NOTE--The teaching throughout must deal with concrete problems; and in the use of mathematical instruments correct methods and exactness of measurements must be looked upon as of prime importance.

(2) *Applied Arithmetic*--Including especially decimal operations, the Metric system, and money calculations such as occur in industrial transactions.

(3) *Woodwork or Ironwork* (or both)--Workshop practice, from working drawings made by the pupils.

(4) *Mechanics*--The simple principles of Mechanics; and with more advanced students, elementary problems in Machine and Building Construction.

Appendix B

Brief Summary of Suggested Syllabus for Higher Grade (Science) Schools [PP 1899 XXVI, pp. 211-216].

1st Year Course

(a) Measurements of lengths, areas, volumes
(b) Verification of well-known proportions
(c) Relative Densities
(d) The Principle of Archimedes
(e) Expansion
(f) The Thermometer
(g) The Barometer
(h) Evaporation, Solution, & Distillation

2nd Year Course

(a) Effect of heat on bodies
(b) Study of the change that occurs when iron rusts
(c) Combustion of a candle
(d) Separation of the active constituents of air
(e) Constitution of Water
(f) Study of chalk
(g) Action of common acids on chalk
(h) Further study of carbon dioxide

3rd Year Course

Course A-Boys: Detailed and systematic study in a classroom and laboratory of Charles' Law, Boyle's Law, latent heat, specific heat, melting points, boiling points, etc.

Course B-Girls

Course C-Rural Schools

Chapter Three: Commercial Education

> "In a country which is commercial above all the countries of the world...and whose very life and prosperity depend in a very large measure on the success of its foreign trade, the public mind had never awaked to the necessity of providing public means for the educational training of those through whose exertions and mental capacity alone this success could be ensured."[108]

Part I: Introduction

The cause of commercial education was framed in much the same way as other educational reform issues of the day. Its deficiencies, real or perceived, were seen as bearing upon Britain's slipping international competitiveness. Correspondingly, as evidenced in the quote above, those that advocated commercial studies felt it to be a crucial element in preparing citizens to confront foreign rivals. A conference on commercial education held in London in 1898 illustrates the dynamics surrounding the topic. In addressing the conference Sir John Gorst outlined the importance of commercial education in the context of the larger issue of international competition and economic efficiency. Gorst told the conference:[109]

> commercial pursuits like all other pursuits, were open to the competition of the whole world; and if their country was to hold the position in the world which she now occupied, and to which the ability and industry of her people had elevated her...They must arm them for the battle of life with the same weapons which their competitors possessed.

In many ways Gorst's speech set the tone for the debate over commercial education in years to come. He recognised the importance of this type of education, placed it into a historical and international context, and proposed an aggressive approach to educating the man destined for a business career and not university instruction. For Gorst commercial studies had to be based on the traditional general education, as was generally agreed among those advocating commercial studies. However, he went further by recommending that commercial pupils complete a general secondary education before embarking on specialized training in commercial studies.[110]

As will become evident, such a proposal was far ahead of its time. Indeed, at this date even Gorst had to admit that the public opinion of the country had not yet developed to the point that the importance of commercial education was universally recognised.[111] The nurturing of public opinion to embrace the importance and

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[108]Blackie, W. G. "Commercial Education; An Address" [Pamphlet] p. 7. (Glasgow, 1888).
[109]"Commercial Education Conference." EN Jul. 23, 1898, p. 494.
[110]Ibid, p. 494-495,
[111]Ibid.

necessity of commercial education was one of the enduring themes of this period. One can argue that opinion never reached the level, especially with regard to the business community, that commercial education was truly valued. What the speech did establish for those assembled at the conference was that commercial studies, no matter what form or content they would adopt in the future, should be regarded as indispensable to the future of the British, and the Scottish people. Gorst stated:[112]

> the man or woman who was content to leave our people intellectually inferior to those with whom they would have to contend in the peaceful arts were no better friends to their country than those who would leave us comparatively defenceless.

Ritchie, the Home Secretary, may have summed up the environment surrounding the topic while speaking in 1901 in London while distributing prizes in connection with the examination held under the commercial education scheme of the London Chamber of Commerce. He told the assembled audience:[113]

> until a comparatively recent period, this country was pre-eminently successful, and therefore it did not seem necessary for the people to take any urgent part in the question of commercial education. But times had changed. This country had been the commercial emporium and the workshop of the world. We had practically no rivals...while we were, comparatively speaking, neglecting the training of our people in commercial education, other countries were taking it in hand with great and increasing vigour, and doing their utmost to make their citizens competitors with us, and they had succeeded.

Yet the issues surrounding commercial studies were to be hotly contested. As stated earlier there was no clear mandate for specialised instruction for those pupils entering business careers. Nor was there a clear consensus among those that did advocate commercial education as to the form it should take. Indeed, it can be argued that there was not even an agreed on definition of the term. For example, did "commercial education" entail specialised instruction in subjects such as shorthand, bookkeeping, and foreign weights and measures? Conversely, did the term simply refer to more traditional subjects such as mathematics, geography, and English taught with a view toward commercial vocations? Or did "commercial education" simply denote a more modern curriculum purged of the classics?

Furthermore, even if one were to assume an agreement over the importance of this field of education, and a common meaning for the term "commercial education", one still had to confront disagreement over where it fitted into the existing educational

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[112]Ibid.

[113]"Mr. Ritchie on Commercial Education." EN Mar. 9, 1901, p. 170.

system. Should, for example, children bound for business be separated at the elementary level from their peers aiming for a university education? Closely related to this issue was whether commercial studies should come within the province of the secondary school or rather the evening continuation school? How was proficiency in commercial studies to be measured and documented? However, prior to addressing these questions the opinion of the public and the business community had to come to a mutual verdict that commercial studies were necessary and deserved attention.

As the Home Secretary noted in his London speech it was not the SED that would initially tackle this questions in the early years of the century. Rather, it was a contingent of the country's businessmen and Chambers of Commerce in various parts of the country who were interesting themselves in the matter. Ritchie was confident that this would prove sufficient to "to make up the leeway which we had lost."[114] Others were not so sure.

Part II: The Business Community & Commercial Education

There is ample evidence that many businessmen not only believed that a boy should be trained in the shop, but also discounted the importance of a formal, systematic commercial education. Some business and community leaders who advocated commercial studies, such as the prominent Glaswegian iron and steel merchant Dr. William Jacks[115] lamented that Scottish employers did not sufficiently encourage those in their employ to pursue commercial studies, either in day school or in the evenings after they had started their jobs. The eminent voice of the respected Scottish educationalist Dr. John Kerr stated equivocally that those truly competent to speak on the matter favoured a good general education rather than any specialised education to prepare for the ordinary requirements of business life. Any lagging behind in Scotland he attributed to the want of encouragement on "the part of capitalists and employers, more particularly with reference to industries."[116]

In 1901 a Joint Sub-Committee on Commercial Education of the Edinburgh Merchant Company, Edinburgh Chamber of Commerce, and the Leith Chamber of Commerce published the results of extensive hearings they had undertaken the previous year. The committee heard from two sections of the community. First, they interviewed a series of businessmen representative of the area. Second, they called on a number of educationalists from various branches of the profession, and they also issued queries to the principals of secondary schools throughout Scotland. The

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[114]Ibid.

[115]Dr. Jacks is discussed in greater detail in the following section dealing with initiatives in Glasgow.

[116]Daily Telegraph Dec. 30, 1902, SRO ED7 1/10/1.

questions were simple: what was thought defective in the present system of commercial education, and what improvements were deemed advisable.[117]

For the purposes of the committee "commercial education" was deemed to be the whole course of educational training for a business career; whether general or specialised. Currently the system was somewhat complicated. A pupil generally left at the age of 14, although up until the Act of 1901 an earlier age of leaving was common. The elementary school provided no distinction in curriculum for those intent on entering a commercial career. After this stage a pupil could continue in an Advanced Department; usually attached to the elementary school. Or they had the option of going on to one of the newly established Higher Grade Schools (HGS) and following a commercial course there. There, in addition to the ordinary English subjects and drawing, a pupil would take one or more modern languages, book-keeping, shorthand, and knowledge of commercial products. The committee pointed out that while the HGSs were technically within the reach of all students who possessed a MC, the number that actually stayed on was quite small. The final alternative was for the pupil to further their commercial education in an Evening Continuation School; usually concurrent with work. However, for those in a "higher social position" or those that had won a bursary to Secondary School was within their reach. Normally such schools were divided into a classical and a modern side. The Committee noted that the problem in this sector was a long standing one: it was the classical side that attracted the clever boy even if he intended to go into business; the modern side often regarded as the haven of the less talented.[118]

The businessmen consulted believed the subject of elementary education was of paramount importance. For them this was not only the foundation of a commercial education, but also the essence of it. The consensus was that elementary education in Scotland was so imperfect that many boys entering the office wrote poorly, were deficient in arithmetic, and unable to compose a proper letter or spell well.[119] For example, James Cormack of Messrs. James Cormack & Co., Merchants and Shipowners, Leith testified that it was "a year or two before a lad is able to write a good business hand."[120] Louis Liebenthal, of Messrs. Liebenthal & Co., Corn Merchants & Commission Agents of Leith confirmed this sentiment when he stated "They [boys] really have to be taught in the office what they ought to be taught in

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[117]See generally; Report by Joint Sub-Committee on Commercial Education. The Edinburgh Merchant Company, The Edinburgh Chamber of Commerce, The Leith Chamber of Commerce. Completed 1900. (Edinburgh, 1901).
[118]Ibid. p. IV.
[119]Ibid.
[120]Ibid. p. 13.

school."[121] John Telfer, Chairman of Andrew Whyte & Sons, Ltd., Wholesale Stationers, Edinburgh, in contrast, claimed the crucial difference seemed to be the type of school attended. He concluded that pupils from Board schools were generally more deficient than those from other schools.[122]

This overall shortfall in the fundamentals of an elementary education was typically attributed to the multitude of courses being taught, rather than a lack of specialised course work. Indeed, the educationalists presented to the panel confirmed that this might have been the root cause, and said that the new Day School Code and Merit Certificate requirements went a long way toward correcting this problem. However, for the truly cynical such as Cormack the calibre of the boys was simple inferior:[123]

> it seems to me that many of the boys who come to business now have not that desire, and ambition, and earnestness in their work that one would like to see and that one does see in boys educated on the Continent...there is a kind of easy going and lazy disposition often manifested.

Regardless of what this deficiency in elementary education was attributed to, it was clear that the majority of businessmen placed importance solely on this basic education. They did not, in general, support the idea of boys staying on longer at school to acquire a specialised commercial education. The reason was two-fold. First, a commonly held belief that a sound elementary education was all that was required to prepare a boy for a commercial career, and second a concern over age.

For those testifying to the committee it was widely held that an elementary education was not only all that was required for a business career, but that it was actually preferable to an education with additional specialised courses in commercial subjects. George Morham an engineer and surveyor from Edinburgh stated he wanted employees with only a good all round English education that had not been "marred by the endeavour to introduce specialities connected with the professions."[124] Cormack echoed this sentiment when he testified that he did not want his incoming employees to have courses such as book-keeping and shorthand.[125]

This view was also expressed outside of the committee hearings. In the same year Duncan Cameron read a paper to the Edinburgh Branch of the EIS. In it he proclaimed without reservation that commercial education should always be secondary to general education. Furthermore, the unenviable international position that Scotland

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[121]Ibid. p. 14
[122]Ibid. p. 18.
[123]Ibid. p. 14.
[124]Ibid. p. 12.
[125]Ibid. p. 13.

found itself in was a function not of a lack of commercial studies, but rather general education. He told the audience: "if we had allowed some other nations to outstrip us in certain branches of commerce, it was just the penalty we had to pay as a nation for our delay in adopting national education."[126]

Indeed, the Chairman of the Edinburgh Chamber of Commerce had in the previous year re-enforced this view of the adequacy of an elementary education for a mercantile life. In a speech delivered at the Annual Congress of the EIS in 1900, John Harrison recognised the way the world of international business was changing and the commercial challenges facing Scotland. However, he held to the old premise that "neither in olden times nor now can you schoolmasters give an education in commerce."[127] Harrison believed in the old tradition of schools making men of boys, and nothing more, in order to give them the facilities for life. He told the Congress: "if you give the boys committed to your care a fair chance of becoming men, they may surely make merchants of themselves."[128]

However, Harrison was actively engaged in the topic of commercial education and did not see it solely as an issue of elementary education. Rather, he viewed complaints regarding commercial education as having a dual foundation: secondary education and the position of modern languages. At the Congress he stated:[129]

> very many of the appeals for improved 'Commercial' Education are only wails over the backward condition of Secondary Education or plaintive cries against the inflexible despotism with which the Classics are forced on those who do not wish such teaching...I have a deep respect for Latin and Greek...yet I suspect it is almost always a mistake to offer such an education to boys intended for business, and probably a misfortune for boys to pass through such a course.

Harrison's view was at once consistent with the majority of businessmen that would testify before the Chamber of Commerce, and yet also at odds with it. He agreed with the principle that there should be no specialisation in elementary school, nor should children be separated between those that were destined for a life in business and those that were not. Rather, much as merchants in general, Harrison believed that this stage of education should be designed "to develop a child's power of observation and thought."[130]

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[126]"Commercial Education From A Merchant's Stand-point." EN Feb. 23, 1901. p. 144.
[127]"Commercial Education" Harrison, J. EN Jan. 13, 1900, p. 33.
[128]Ibid.
[129]Ibid., pp. 33-34.
[130]Ibid., p. 34.

Where Harrison parted company with those later to testify before the Chambers' Committee was on the issue of the extent of education. He felt that a secondary education did play a role in preparing those pupils who were not planning to go to university, but rather pursue business careers. During his speech he advocated that for this group of students the classics be dropped altogether upon entering higher schools. However, he still did not recommend "commercial" subjects per se. Harrison encouraged subjects such as writing, arithmetic, drawing, grammar, history, geography, Science, Mathematics, and English literature. His departure, therefore, was in the length of education he recommended, not necessarily in the type. He concluded:[131]

> I believe that there is a great necessity for the development of the modern side of schools, so as to put the modern on an equality, as far as standing is concerned, with the classical, and to induce pupils to remain at school until 16 or 17 years of age, instead of leaving as most do now, before they are 15...I deprecate the idea that good education, and as much of it as he can possibly get, is not a right and necessary thing for every boy, however humble his start is going to be in the world of business.

This desire to see boys stay on to 17 years of age was not embraced by those Harrison directed as Chairman of the Edinburgh Chamber of Commerce. Key for the businessmen testifying before the Committee in 1901 was the age at which boys came into their offices. Thus, the adversion to additional specialised commercial education was compounded by the fact that the merchants wanted boys no older than 15 years of age and often as young as 13 years of age. Mr. Walker of Messrs. James Currie & Co., Shipowners, Leith stated that he wanted boys to enter his employment no later than 14 or 15 years of age. Echoing earlier criticisms of elementary education, he added that there was no need for them to be any older if properly taught elementary subjects. Age was the primary concern. When questioned if it would be better to take on a boy a bit older who had commercial training he answered that regardless of other factors he wanted a younger boy. He concluded that it was too awkward to take a boy after 15 years of age.[132]

Liebenthal offered a similar complaint. In supporting his policy of taking boys under 15 years of age he asserted that an older boy did not take directions and was thus harder to train.[133] T. Hector Smith, General Manager of the National Bank of Scotland and President of the Institute of Bankers in Scotland, said that he preferred a boy to enter employment at a younger age because no matter what age he started they

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[131]Ibid., pp. 34 & 36.
[132]Report of the Joint Sub-Committee on Commercial Education. p. 10.
[133]Ibid. p. 14.

would have to begin as a junior. Older boys, even with more training, found it difficult to start at a low position with others younger than themselves.[134]

Even Jacks, a champion of commercial education, was not immune to the argument of an early leaving age to enter employment. In a speech to the EIS in March of the same year he declared that he preferred a lad of 14 or 15 years, rather than one of 15 or 16. However, Jacks distinguished himself from those advocating only elementary education. While he stated that a better training could be had in a well-equipped office, Jacks felt it should be in conjunction with attendance at night school.[135]

It should not be presumed that there was a unanimous opinion that the only required education was elementary and boys should enter employment at an early age. Several businessmen testifying before the Committee presented a more progressive and enlightened opinion. For example, Robert Weir, of Messrs. Livingston & Weir, Importers, Edinburgh and Leith, felt almost any boy leaving school was the better for studying commercial topics. He told the Committee: "Whatever walk of life a boy may ultimately choose, professional or otherwise, he is none the worst of a good business training."[136] James Anderson, of Messrs. J. G. Thomson & Coy, Wine Merchants, of Leith, also advocated commercial education. He commented that as many as 9 out of 10 men in Scotland belonged to the commercial and industrial classes. Given this figure, something had to be done for the needs of those boys whose scholastic careers ended at 14 or 15 years of age.[137]

Others besides Harrison openly bucked the trend of wanting boys at a young age. An Edinburgh architect Thomas Ross said that 14 or 15 years of age was too young and gave preference to boys who had stayed on at school an additional year or two.[138] Cameron addressing the Edinburgh Branch of the EIS in the same year said that the panacea was allowing pupils more years at school. He told the Institute:[139]

> "They [the merchants] must allow the boys longer at school, and all they asked would be to give their later studies, if they were going into business, a bias in favour of commercial pursuits. This would be no untried experiment. It was being done in America and on the Continent now."

In the end the Committee seemed to listen to this vocal minority, and ignore a good deal of the testimony adverse to commercial education. It cited three factors to

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[134]Ibid. p. 24.
[135]"Education Institute of Scotland; Provincial Meeting At Glasgow" EN Mar. 9, 1901, p. 171.
[136]Report by the Joint Sub-Committee on Commercial Education. p. 11.
[137]Ibid. p. 16.
[138]Ibid. p. 15.
[139]"Commercial Education From A Merchant's Stand-point" EN Feb. 23, 1901, p. 144.

support its call for improvement in commercial studies. First, the extraordinary development of business in the preceding years. This included the introduction of railways, steamships, telegraphs, and the expansion of international commerce. Second, it pointed out the changing conditions and methods of conducting business, such as the development and expansion of large corporations and limited liability companies. Finally, the Committee reflected on the often discussed topic of international commercial rivalry, and stated that the continental nations and America had fully realized the necessity of complete provision for commercial education. In summing up the Committee made a strong and impassioned call for improvement in this area of the education for the Scottish people:[140]

> "Taken cumulatively these reasons demand in the opinion of the Committee the early and earnest attention of all concerned to the task of improving commercial education. In the past, not a little credit for the commercial position among the nations to which Scotland has attained is due to the education which was available, but if that position is to be maintained, it is imperative that advances must be made in education commensurate with the requirements of the present time."

The debate often spilled out of the structured confines of committee hearings. In this more informal arena those most vocal tended to agree with the promotion of commercial studies. This was more true on the subject of curriculum than on the proper length of study for business bound pupils. For example, in the same year as the Edinburgh Chamber of Commerce report, the Educational News reported of a confrontation between the 'traditional classicist' Mr. Menzie, President of the Education Institute of Scotland, and a jute merchant by the name of Weinberg. After Menzie's speech Weinberg, declaring himself to be a 'practical businessman', derided the fact that Scottish schools ignored basic and practical elements of foreign business methods, currencies, and the study of the commercial resources of foreign countries. Menzie questioned the necessity of such instruction, but the jute merchant would not be moved. He countered that he had to hire clerks from Germany because of the lack of qualified Scottish boys. He added, that the German clerks were not only better educated in commercial pursuits, but were also more industrious.[141]

This brings up the question of how, if commercial classes were readily available, one was to judge the qualifications of a boy who had undertaken a commercial education. The answer was to be, as it was for elementary and secondary

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[140] Report of the Joint Sub-Committee on Commercial Education. p. VI

[141] "Commercial Education." EN Jan. 5, 1901, pp. 17-18.

school, certificates. The real issue that was to solved was what entity would control them.

Part III: The Certificate Debate and Glasgow's Independent Moves

In about 1899 the Glasgow Chamber of Commerce and Manufactures started to consider the ways in which it might encourage greater commercial education in the city. By all accounts the program's central patron was William Jacks, the iron and steel merchant and a member of the Chamber. During a meeting of the directors of the Chamber on the 14th of August 1899 Jacks urged the Chamber to take steps to organise a system of commercial education in Glasgow, and more importantly for granting certificates of proficiency under the auspices of the Chamber.[142] It was agreed to remit to a group which would include the President of the Chamber and Jacks, as Convener, to consider the advisability of the Chamber taking action of this kind. The committee was specifically to consider the desirability of the Chamber granting certificates that guarantied a standard of commercial education, and also to propose details for such a scheme.

Notes by Jacks revealed that it was summarily concluded that such a scheme was desirable. In doing so, the strong competition from foreign companies was the main impetus. It was written: "It is universally admitted that one of the reasons why Foreign Nations are forging ahead in British Commerce is the want of a proper commercial training on the part of British youths."[143]

However, the committee did not seek to directly provide or stimulate commercial education. Rather, they opted for a certificate scheme that would guarantee to employers that the holder possessed certain qualifications. The hope was in time such a scheme would lead to employers favouring lads with such a certificate, and thus indirectly stimulate commercial education. In this regard the Committee took its cue from a similar scheme set up by the London Chamber of Commerce. Started almost a decade earlier, the London Chamber had begun issuing Junior Certificates in 1890, followed that with Senior Certificates beginning in 1894, and had witnessed steady improvement each year.[144]

Thus, for Jacks the desirability of such a scheme seemed unquestionable, and the Committee moved on to the question of what form the Glasgow version should take. It made three proposals. First, an education committee should be appointed with members selected from the Directors of the Chamber and representatives of leading

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[142]Private Proof. Chamber of Commerce of Glasgow. Commercial Education Extracts from Minutes of Meeting of the Directors of 14th Aug. 1899, p. 1. SRO, ED7 1/10/1.
[143]Ibid. Notes by Dr. Jacks on Remit to the Committee.
[144]Ibid. p.2

educational institutions in Glasgow. Second, it was the opinion of the Committee that the Chamber should not directly associate itself with any particular educational institution, but rather simply set exams and award certificates. Individuals should be allowed to gain qualifications "as they may."[145]

As for the actual form of the certificate, the group was not as specific. It was suggested that the certificate of the Society of Arts in London could be acceptable, but a local examining body may also be necessary.[146] With regards to a curriculum the Committee was more specific, but of course it had no power to implement any new school curriculum. Again, the hope was that requiring certain subjects the Chamber's certificate would indirectly encourage their instruction in the schools. With regards to some subjects this did no present a problem. Writing, arithmetic, English, and geography, were widely taught. However, other recommended subjects such as book-keeping, shorthand, and one modern language other than French or German such as Russian, Chinese, or Japanese[147] may have made good commercial sense, but were not comprehensively taught in the Scottish schools. The question of standards brought no clear agreement. However, it was noted that many examinations "show a lamentable ignorance of what is required for a practical knowledge of a language in a commercial sense."[148]

Over the course of the next month Jacks and the Committee searched for a examination that adequately assessed students for commercial pursuits that the Chamber could give its imprimatur. On September 22, 1899 Jacks wrote to Craik relating the Glasgow scheme and their desire to find a suitable examination.[149] However, after perusing the Leaving Certificate of 1899 in German Honours and French, he related that "such qualifications as these examinations seem to deal with are quite unsuitable for commercial life." He proposed co-operation of a sorts between the Department and the Chamber. He enquired if the SED would be willing to examine on a programme drawn-up by the Chamber on lines acceptable for a commercial life, instead of the one that presently existed.

Despite a history of publicly endorsing commercial education and calling for greater involvement from businessmen and the mercantile community, Craik was not receptive to Jacks' overtures of co-operation in any respect. Indeed, in a return letter to Jacks he denies that the Leaving Certificate examination was even open to the

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[145]Ibid.
[146]Ibid. p. 3.
[147]Ibid., p. 4.
[148]Ibid.
[149]Letter from Jacks to Craik, Sep. 22, 1899. SRO, ED7 1/10/1.

criticism levelled at it, and states that the Department must retain sole responsibility for any such exams.[150]

Despite the lack of any outright encouragement from the SED, Jacks presented the proposed scheme to the October meeting of the Directors of the Glasgow Chamber of Commerce. Under the scheme the Chamber would award certificates of commercial competence and act as an employment bureau of sorts. Jacks related to the Directors that at present the system of examination papers was much too diffuse, and the object of the proposal was to put a premium on a selected set of subjects required for commercial life. Further, if firms gave a preference to boys possessing the certificate it would induce more boys to go in to those commercially related subjects required by the Chamber's certificate.[151]

The idea of the Chamber acting as a type of employment bureau was new, but was in line with the ideals of efficiency. A feeling was expressed that simply advertising a position had become a very inefficient and wasteful way of filling an opening. Jacks related a personal experience in which 213 individuals replied to an advertisement, yet only 4 possessed the requisite qualifications. The Chamber with the aid of the new certificate could vet unqualified applications and quicken the process for businessmen. [152]

A good many members of the Chamber supported the scheme, including its President, Handasyde Dick, and the Chairman. However, Jacks did not receive unanimous support. Some members such as Paul Rottenburg proclaimed the view that such matters were the business of the Glasgow School Board, rather than the Chamber. He added that for all the adulation placed on the German system, not one German Chamber of Commerce had embraced a similar scheme. W. F. G. Anderson echoed similar sentiments when he dismissed the plan and contended that there were questions of greater importance for the Chamber to deal with. He stated: "What had they been about with all our educational institutions during the last 20 years if boys leaving our Board schools were not fitted to go into offices and do the work. In the end the Chamber sent the plan back to the Committee with the mandate to consider the suggestions made, and report to the Chamber once again. It would be almost two long years before the Glasgow plan would get another airing.

Other authorities in Scotland were not waiting. In the interim, as the Glasgow Chamber of Commerce put their scheme on hold for reconsideration, the Executive Committee of the Association of School Boards adopted a scheme for examination in

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[150]Letter from Craik to Jacks, Sep. 25, 1899. SRO, ED 7 1/10/1.
[151]Glasgow Herald. "Chamber of Commerce." Report of the Monthly Meeting of the Directors of the Glasgow Chamber of Commerce and Manufacturers. Oct. 10, 1899. SRO, ED 7 1/10/1.
[152]Ibid.

commercial knowledge. The group conceded presence of other exams by existing authorities, but they did not feel that these could be adequately utilized by business minded students either in evening schools or the upper classes of day schools.[153] The Association called for examinations in languages such as English, French, German, and Spanish; totally disregarding the traditional Latin and Greek. In addition, business subjects including book-keeping, shorthand, commercial arithmetic and commercial geography would be tested. Certificates of proficiency would be awarded along with a few prizes. It was resolved that the whole scheme be laid before the School Boards of the country, and they be asked to make arrangements in the localities for the appointment of committees to take charge of question papers as well as superintend the examinations.[154]

Although there is no evidence that the scheme was successful, its importance was tremendous as it was the first attempt at a nationwide plan of examinations and certificates in commercial training for Scotland. It could have superseded the local examinations and awards that were beginning to proliferate around the country. This would have undermined one of the prominent arguments in Scotland: that local exams, conducted by local authorities which gave their imprimatur to them caused confusion, and lacked a commonly recognised national standard.

At approximately the same time the Edinburgh Merchant Company began discussing their own role in commercial education. At the beginning of 1900 a group from the Merchant Company was given the remit to consider the whole issue and "take such action as they may deem proper in support of the movement for rendering that department of instruction more efficient and extended."[155] In bringing the issue before the company the Master, John Macmillan, stated that there was no specialized education for those "engaged in the work of distribution, in managing the great private businesses and limited liability companies engaged in conducting the internal business of the country."[156]

The Merchant Company was uniquely suited to address the question of commercial education. Not only did it represent the merchants of Edinburgh, it also was represented on the Secondary Education Committee. Most importantly, unlike the Glasgow Chamber of Commerce, it managed some of the cities great public schools. Thus, even more so than the Glasgow case, the Merchant Company had direct

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[153]"Commercial Education. The Association of School Boards Scheme" EN Dec. 8, 1900, p. 839.
[154]Ibid.
[155]Scotsman Jan. 19, 1900. (No title), SRO, ED7 1/10/1.
[156]Ibid.

influence over the course of education; at least with regards to the institutions they managed.

Even so many members balked at the idea of direct involvement, though most voiced sentiments similar to their Glaswegian counterparts. However, some expressed faith in the current state of education, stating that such faith was justified by the success of the British businessman.[157] Others echoed the often heard view that the best way to promote commerce is to encourage sound primary and secondary education. Most importantly the members recognized that to a great extent education in the secondary schools was governed by the ideals of University education. Thus, until the Universities clearly recognized the need for commercial education, through the creation of Faculties of Commerce and other such moves, efforts to integrate it into secondary education would be impotent. The Merchant Company, therefore, decided that it would work to promote commercial education at the university, including a better utilization of their endowed chair at the University of Edinburgh in Political Economy.[158]

By making the university culture specially adapted for the future businessman it would not only raise the dignity and value of commercial education in secondary schools, but also help to provide the country with a highly cultivated mercantile community. Scotland would be the richer if it could "see again the golden age of the merchant princes of Venice and Florence, who led the van of Italian civilisation."[159]

However, others openly scorned the approach of waiting for the Scottish Universities to take the lead in commercial education. At the 1901 Annual Congress of the EIS in Dundee such a position was ridiculed. J. G. Thomson spoke of commercial education in the United States. He noted that in that country, which Scots now had cause to fear as a commercial rival, education did not come from the "strata above", but rather from the commune.[160] And in a direct attack on those who would wait for the universities he said:[161]

> There was no use talking of founding and equipping a commercial university or college so long as they had not the rudiments of commercial training founded in their schools. Seeing that their national life depended so greatly on their commerce and trade, these matters ought to have special attention at school.

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[157]Ibid.
[158]Ibid.
[159]Letter to the Editor. Scotsman Jan. 22, 1900. SRO, ED7 1/10/1.
[160]"Education Institute of Scotland; Annual Conference at Dundee" EN Jan. 5, 1901, p. 19.
[161]Ibid.

This view of the role of commerce and education was fairly wide spread at the time, and not limited to one or two educationalists in the major cities of Edinburgh and Glasgow. G. D. Crammond, the Chairman of the Galashiels School Board, voiced similar views. He spoke of the ascendancy and fall of nations in the same breath as the need for improvement of commercial education in the whole of Britain. The fall and disappearance of great and powerful nation states such as those of the Egyptians, Romans and Greeks was related to the contemporary condition of Britain. Thus, the cause of education was placed into an almost mythical context. Crammond stated in the speech:[162]

> The history of the world, the story of the nations show a continuous struggle for the ascendancy. It is by the law of evolution that through a constant succession of wars, great tribulation, poverty, privation, and struggles, this nation, by the will and blessing of God, and by the energy, aptitude, and grit of the people has risen to be the greatest Empire the world has ever seen. But let us not be at ease in Zion....Men are openly speculating whether as a nation we shall outlive the century upon which we have just entered...Let us, as prudent men, consider the probabilities and possibilities of our future. Were the masses of the people to think seriously they could not fail to recognise the claims of education, stir up their latent energies, and apply themselves diligently to put matters right...Let us anxiously watch and gravely consider the progress of our neighbours in America, Germany and Russia.

The Glasgow scheme quietly resurfaced at a special meeting of the Chamber of Commerce on February 27, 1901. Jacks was, as in 1899, seemingly in charge of the proposal. This time the presentation to the meeting laid out a clear framework from which the Chamber could begin a concrete program of awarding certificates. The report of the 'Special Committee on Commercial Education' recommended that the Chamber should set up a committee to be called the 'Education Committee', and it should be empowered to grant "in name and with the seal of the Chamber, diplomas or certificates of proficiency in those subjects which the Education Committee deem necessary for efficiently equipping young men for a commercial career."[163] Examiners were also to be approved by the Committee.

Following the model of the London Chamber of Commerce, the certificates were to be of two classes: a junior certificate which would guarantee that the boy was qualified to work in any office, and a senior certificate which represented a higher

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[162]"Galashiels and Commercial and Technical Education Address by Mr. Crammond", The Galashiels Telegraph, Feb. 12, 1901. SRO, ED7 1/10/1.

[163]Scotch Education Department. Minute Paper. "Glasgow Chamber of Commerce and Commercial Education." The Scotsman, 26 Feb. 1901. SRO, ED7 1/10/1.

level of attainment. Subjects for the two were strikingly similar. Both required writing, arithmetic, book-keeping, shorthand, English, geography, and two modern languages. Presumably the senior certificate required a higher level of proficiency, and it also stressed the value of the previously neglected languages of Russian, Chinese, and Japanese. Jacks' enthusiasm for these later three seemed to have been tempered somewhat from earlier days, as these languages were purely optional. It is quite possible that he heeded the warnings of the Scottish media that if this trio were included among the half dozen required subjects the Chamber's certificate would have only a half dozen recipients.[164]

Furthermore, at a general meeting of the Chamber of Commerce in March of 1901 it was considered whether they should insist upon every student being passed by its own examiner before getting the Chamber's diploma, rather than recognising the certificates of other institutions. This would have also followed the London example. It was decided not to recognise these other certificates and require all to pass their requirements. In coming to this decision it was said: "If they were to recognise the certificates and diplomas of every institution their diploma would become valueless."[165] However, they did not care where or how the education was obtained.

As in the case of the Merchant Company's consideration of commercial studies, what role if any the universities should play was considered. In Glasgow, however, it received a much briefer airing and did not stand as an impediment to the Chamber taking action. For example, Nataniel Dunlop agreed with the general purpose of Jacks' scheme, but felt that the universities should be taking the leading role. He hoped that "before the Chamber engaged in this comparatively poor scheme, the Committee would devote themselves to seeing whether they could not, in connection with the University, carry out a scheme of a better description."[166] This view was quickly dismissed. In seconding Jacks' scheme J. D. Hedderwick summed up the position of the majority with regards to the universities:[167][168]

> the standard of efficiency in commercial education could best be set up by men who knew what they wanted as commercial men. Let the University adapt its teaching by all means to the wants of the day, but let the wants of the day be distinctly put forward as they were in this scheme of

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[164]Glasgow Herald. Oct 10, 1899.

[165]"Glasgow Chamber of Commerce." EN Mar, 2, 1901, p. 154.

[166]Ibid.

[167]Ibid. [It is interesting to note that at the same meeting any dissent to the scheme on the grounds of money was quelled by Dr. Jacks who repeated his offer to pay the expense for the first two years or even longer.]

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> Dr. Jacks, by commercial men, who knew by experience what was wanted.

Almost as soon as the Glasgow plan was made public in 1901 opposition began to mount against it. Surprisingly the first shots of the salvo came from another proponent of commercial education. Crammond was a vocal participant of the discussion over commercial education for the whole of Scotland, and when the Glasgow Chamber of Commerce scheme re-emerged he contacted Craik to express his disapproval of the scheme. However, this disapproval was based more on his belief that a nationwide system of such certificates directed by the SED was required, rather than a distinct opposition to the Chamber's desire to become more involved in commercial education.[169]

Less surprising was the opposition expressed by some university officials. Some officials questioned the very premise that commercial studies had any effect on business and economic performance. For example, in an address at the opening of St. Andrews University, Principal Donaldson expressed doubt that such education had anything to do with business success. Rather, he cited legislation, traditions, the character and the habits of the people as having the necessary influences. He stated: "The people of Britain attained supremacy in trade at a time when popular education was almost unknown, and when the training at the secondary schools and the Universities was imperfect to a marked degree."[170] Commercial and other specialised studies, and the related certificates were seen as a waste of time. Rather, Donaldson asked:[171]

> Was it not sufficient...that the tradition of energy and of the methods of organisation and of skilled labour should pass down from father to son? That it was sufficient was the answer which the great majority of manufacturers and merchants gave to the question.

There was also a vocal element of the educational establishment that, while not doubting the desirability of certificates, disliked the prerequisites of Glasgow's. In an editorial in the Educational News it was recognised that Jacks' goal was to attempt to shake the country out of its complacency and open its eyes to the "danger of their position."[172] However, the certificate demanded an unrealistic level of academic accomplishment from its candidates; both in terms of the subjects required and the

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[169]Letter from Crammond to Craik. Feb. 28 1901. SRO, ED7 1/10/1.
[170]"Education and Business Success." EN Oct. 12, 1901, p. 736.
[171]Ibid.
[172]"Dr. Jacks." EN Mar. 9, 1901, p. 174.

level of proficiency. The premise of the criticism, however, was based on the limit of 14 years of age for boys entering office work. It was contended:[173]

> The average boy cannot be trained up to the requirements of Dr. Jacks at that age; and if he could, he would expect very much better financial treatment than is at present accorded to young clerks.

Most importantly, the requirement that boys pass the Glasgow certificate examination, and that the Chamber not recognise the certificates of other institutions drew fire. In future would an Edinburgh man only be allowed into a Glasgow office when he had passed that city's exam? If every Chamber of Commerce was to follow suit, there would be so many standards and examinations that individuals would not be able to pass easily from one district to another. Thus, the writer also objected, as Crammond did, to the proliferation of local certificates, and urged a common national standard. However, the SED should not be the authority in this regard. Rather, it should be the EIS:[174]

> The Education Institute is already acting in that capacity for the General Medical Council and other bodies...Better then to start on the right lines at once, and entrust to the Education Institute the work for which it is so well fitted.

Most damning was the opposition expressed by the SED in London, although it was all private, behinds the scenes, never made public, and never directly expressed to Jacks or the Glasgow Chamber. Indeed, letters from the Department to the authorities in Glasgow were, if not outright encouraging, at least cordial and not dissuading. Yet, behinds the scenes there was real hostility to the plan from both Craik and George Macdonald, an SED official in Edinburgh. Craik privately believed the scheme to be "absurd and out of place."[175] Macdonald felt it could be "mischievous" and was a deliberate attempt to "undersell the Department."[176] In addition, Macdonald privately harboured a good deal of personal animosity towards the main proponent of the Glasgow scheme: Jacks. At one point he called him "a man of no real standing" who was at best "but half-educated,"[177] and contended that the activity of the Glasgow Chamber on commercial education was due in no small part to "a desire for self-advertisement" on the part of Jacks.

However, this animosity and opposition was based, at least in part, on misinformation and ignorance. For example, Craik questioned whether Japanese

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[173]Ibid.
[174]Ibid.
[175]Letter From Craik to Macdonald. Mar. 7 1901, SRO, ED7 1/10/1.
[176]Letter From Macdonald to Craik. Mar. 5 1901, SRO, ED7 1/10/1.
[177]Letter From Macdonald to Craik. Mar. 8 1901, SRO, ED7 1/10/1.

would have to be added to the curriculum of all Scottish schools since the Glasgow plan mentions it, without apparently being aware that the actual plan only called for the course to be optional.[178] Macdonald's assertions about the plan come despite the fact that he admitted to never having read it and getting his information about it second-hand.[179] In addition, he once commented that the Department should point out the existence of the Leaving Certificate to the Glasgow business community. Obviously he was unaware of earlier communications from Jacks commenting that it was felt that the Leaving Certificate was ill-suited to evaluating a boy for a commercial career.

Finally, Macdonald's personal opinions about Jacks' level of education and standing in the community were delivered despite the fact that he had never met the man,[180] and by all accounts were totally inaccurate. Jacks possessed an LL.D., and in addition to operating his own successful iron and steel company he was the President of the West of Scotland Iron and Steel Institute. It was reported that he was familiar with the German system of education, and had made a special trip to the United States to inquire into American methods of commercial training. He would later become President of the Glasgow Athanæum Commercial College. The Daily Telegraph described him as "an authority on the subject."[181]

Furthermore, Jacks had developed his proposal in conjunction with the EIS. Macdonald asserted that the scheme was hatched by one man in conjunction with an ill-suited institution. Macdonald believed that the Institute was not qualified to conduct such exams, and presumably it was the SED which was qualified. This also was an uninformed opinion. It is debatable whether the EIS should have been the organ issuing such certificates, but it was not true that Jacks was on a one-man crusade for personal aggrandizement. For example, early in 1900 Jacks appealed to the Committee on Staff and Teaching of the Glasgow and West of Scotland Technical College (GWSTC) for input on the certificates. After reviewing the proposal the Committee recommended appointing a representative to the Education Committee of the Glasgow Chamber of Commerce. The Board of Governors agreed and appointed a Mr. Copland to be the College's representative.[182]

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[178]Letter From Craik to Crammond. Mar. 1 1901, SRO, ED 7 1/10/1.
[179]See, Letter of 5/3/01.
[180]Letter of 8/3/01.
[181]"Glasgow and Commercial Education; Some Expert Opinion" Daily Telegraph. Dec. 30 1902. SRO, ED7 1/10/1.
[182]"Report of the Meeting of the Committee on Staff and Teaching, GWSTC." Feb. 28, 1900. GWSTC Minutes 1899-1900. pp. 58-60, SUA E 1/1/8; "Minutes of the Meeting of the Governors, GWSTC" Apr. 17, 1900. GWSTC Minutes 1899-1900. pp. 65-67. E 1/1/8. Note the College's interest in the new certificate despite the fact that they were identified as a technical college. Up until 1896 the GWSTC had issued a Certificate in Commerce, in which year it was decided to abolish it.

However, Macdonald's and Craik's objections to the Glasgow Chamber's certificates seemed to be based predominantly on its perceived threat to the authority and work of the SED, and most importantly, the still relatively young Leaving Certificate. Macdonald, in particular, believed that the hope of the scheme was "the ignorance of the mercantile community" to the Leaving Certificate.[183] In addition, he believed that such a scheme would mean there would be no inducement for pupils to stay on at school to attain the Leaving Certificate.[184]

This, combined with Craik's views, seemed to make it clear that the SED viewed such local schemes and, as Scotland's largest city, Glasgow's in particular as a challenge to Departmental authority and its LC. However, the moves by Glasgow's Chamber and others were premised on a conclusion by the businessmen that the LC did not suit their needs. It is curious that this view should come as a surprise to the SED. Since its inception in the 1880s the LC was intended to serve as the sign of satisfactory completion of a secondary education for those pupils intending to go on to university or to the old learned professions. Indeed, during the course of its development it was the input of these institutions which was solicited by the SED, not those of the business community. Thus, the LC was designed and developed to suit the needs of universities, and to replace the entrance examination of many universities and professional organizations. Yet, Craik and the SED found it an affront that the LC was rejected by the business community; a constituency it was never intended to suit.

Even if it was true as Macdonald stated that "the great majority of the Chamber--even of those in favour of the scheme--do not realize in anything but a hazy way the existence and meaning of the Leaving Certificate,"[185] did this not reflect a failure on the part of the SED rather than the merchants? The LC had by this time had been around for over a decade. Either the LC was not relevant to them, or the SED had failed to communicate with the business community of Scotland.

Either way, the SED had to decide what action if any it would take with regards to the Glasgow's certificate scheme. At first Macdonald questioned whether the SED could intervene "with dignity", but then asserted that "the scheme is not worthy of such attention."[186] Craik preferred to see if it would "die a natural death." He added: "of course we would have to do something if any inquiry were addressed to us."[187]

See; "Report of the Meeting of the Committee on Staff and Teaching, GWSTC" GWSTC Minutes, 1895-96, pp. 110-111. E1/1

[183]Un-numbered Minute sheet of SED to Craik. Mar.8, 1901, SRO, ED7 1/10/1.

[184]Ibid.

[185]Ibid.

[186]Ibid.

[187]Letter From Craik to Macdonald. Mar. 7, 1901, SRO ED7 1/10/1.

Craik travelled to Glasgow in March 1901, but not for the purpose of the SED intervening in the Glasgow plans. However, upon hearing of Craik's visit to the city the Chamber contacted him about the possibility of a meeting.[188] Craik accepted and, although he did not even know where the office of the Chamber was, he did appear to take the meeting seriously. He contacted Macdonald asking him if he could accompany him to the meeting and what papers would be necessary.[189]

It is unclear exactly what transpired at the meeting. However, it seems fairly certain that in addition to Craik and Jacks, Handasyde Dick was also present. It also seems fairly certain that Craik was not as blunt about the SED's opposition to the certificates. Though there was evidence that he did dissuade the Glasgow representatives. Shortly after the meeting Jacks contacted Craik proposing that all action on the certificates be postponed for a couple of months.[190] In addition, he asked that the SED make some type of official announcement of its intentions during that time. Craik agreed and stated the during the time the SED's views should "mature" and Jacks would be able to decide if they met with his approval.[191] It was likely that during this period Craik had begun to formulate SED plans to issue Commercial and Technical certificates. It seems possible that the SED's move to institute commercial certificates was in an effort to provide a common standard and stop the proliferation of examinations by numerous local authorities.

However, it would not be until the following year that definitive moves were made. In the meantime, Craik entered into a discussion with Jacks regarding the suitability of the Merit Certificate for the purpose of evaluating boys for commercial pursuits. Jacks was unimpressed, and wrote to Craik:[192]

> I do not wonder that it has appeared of so little value to a commercial man for it conveys no information whatever except in the postscript, which like a lady's letter is the most important part as it says 'he is a good little boy.' The rest of the certificate says absolutely nothing practical.

Jacks suggested some type of numerical ranking of results. For example, marks between 75 and 100 being awarded a numerical rank of "1", 60 and 75 a "2", 50 and 60 a "3", and marks below 50 being awarded a "4". He then recommended that the certificate list the courses completed with the corresponding numerical mark so that the potential employer could have a better idea of the abilities of the pupil. He

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[188]Letter from W. Mills, Secretary of Chamber of Commerce and Manufacturers of Glasgow. Mar. 22, 1901, SRO ED7 1/10/1.
[189]Letter from Craik to Macdonald. Mar. 23, 1901, SRO ED7 1/10/1.
[190]Letter from Jacks to Craik. Apr. 1, 1901, SRO ED 7 1/10/1.
[191]Letter from Craik to Jacks. Apr. 2, 1901. SRO ED 7 1/10/1.
[192]Letter from Jacks to Craik. Apr. 1, 1901. SRO ED7 1/10/1.

concluded: "You may take it that the certificate will never be looked at by any sound businessman as it now stands; it is absolutely useless."[193]

It was not a complete surprise that Craik did not agree with this '"input" from a man one of his colleagues had called "at best half-educated". Indeed, Craik appeared to have had his fill of Jacks' expert opinions. He related that there was no chance that "My Lords" would integrate the suggestions, and personally considered them "distinctly harmful."[194] However, what Craik described as Jacks' "misapprehensions" regarding the certificate, and his personal response to this unfavourable input goes a long way toward illustrating the gulf that existed between Craik as an educationalist, and Jacks as a businessman. Indeed, one can even argue that it reveals a gulf between the educational policy-making of London and the day to day business world of Scotland's largest city. Craik vigorously defended the MC on the basis that it showed that the holders had a "thorough proficiency in reading, writing, arithmetic and English".[195] Therefore, it was obvious in his view that the certificate could not be described as showing "absolutely nothing" as Jacks asserts.

The gap widened when it came to terminology. In reference to one course Jacks was unfortunate enough to call it a 'special subject'. Craik was quick to point out that the curriculum no longer embraced 'special subjects'[196] unmindful of Jacks' ignorance of the SED's differentiation of the terms. Any disagreement with regards to courses taught was dispensed with in Craik's mind by the rule of law: "The subjects enumerated are those which Parliament has proscribed for every inspected school in the country."[197] Thus, every pupil must receive instruction in these subjects in order to comply with the law. Yet, Jacks suggestion was that the law as it stood was not useful for the evaluation of future employees by a man of business. Possibly the law should be changed.

However, it would appear that the two sides were simply not on the same wavelength. This became more apparent when the course in Nature Knowledge was discussed. Jacks had complained that the listing of a class labelled such was of no use to the man of commerce. Craik replied with academic indignation that Nature Knowledge was "training in objects of common knowledge and in habits of alert observation which is essential to all sound education." He added: "It is a term the

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[193]Ibid.
[194]Unnumbered SED Minute Sheet. Apr. 2, 1901, SRO ED7 1/10/1.
[195]Ibid.
[196]There seemed to be even further confusion here as Craik assumed Jacks was referring to the defunct "specific subjects". In brief, these had provided the opportunity to undertake further education in separate subjects above the elementary level.
[197]Unnumbered SED Minute Sheet. Apr. 2, 1901, SRO ED7 1/10/1.

significance of which is fully understood in the educational world."[198] However, it was a term the significance of which was not understood in the world of businessmen and merchants. Jacks replied to Craik that:[199]

> Now there is not a word to show what particular branch of nature knowledge the youth possesses and it certainly is impossible that he can possess all. I must say that looking at it as a business man I would never dream that it meant 'training in objects of common knowledge and in habits of alert observation.'

Furthermore, according to Craik the idea of standardized marks belonged to a state of things that had hopefully passed away, and the SED would not think of reverting to obsolete methods. Craik assured Jacks that his criticism would be less once he became better acquainted with "our methods."[200]

Jacks seemed to be fully aware of the divide between the business community and the educationalist: "I have no doubt that the certificate would be clear enough and of value to anyone who is purely an educationalist."[201] However, he continued to endeavour to explain his position to the educationalist of Whitehall. The central issue for Jacks was that terms and policies that were clear to the educationalist in London did not translate into a practical means of evaluation for the businessman. He wrote:[202]

> "It [the Merit Certificate] not only does not indicate the bent of the young lad's mind or ability, but it gives no idea as to the extent of his knowledge in any subject. It simply says that his knowledge is according to the requirements of the Merit Certificate. While educationalists have these requirements at their finger ends and know what they mean the ordinary business man would require to study all the conditions of the Merit Certificate before he could even have an idea of what the lad's abilities were.

Craik ceased attempts to convince Jacks of the value of the MC. Rather, he was simply assured that greater familiarity with the certificate would dissipate his criticisms. It seemed that Craik found Jacks' views to be particular to him and not representative of a broad spectrum of the business community.[203] However, the Chambers of Commerce of several other cities had also opted to award their own certificates to certify proficiency in commercial subjects. The Chambers of both Dundee and Aberdeen awarded certificates under the much admired scheme of the

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[198]Ibid.
[199]Ibid.
[200]Ibid.
[201]Letter from Jacks to Craik. Apr. 9, 1901. SRO ED 7 1/10/1.
[202]Ibid.
[203]Letter from Craik to Jacks. Apr. 16, 1901. SRO ED 7 1/10/1.

London Chamber of Commerce.[204] As with Glasgow, the chambers of these cities urged employers to give preference to boys that had earned the certificate. In addition, by 1902 the Glasgow Athenæum Commercial College, the Glasgow YMCA educational department, and the Coatbridge Technical Institute had adopted the course drawn up by the Glasgow Chamber of Commerce.[205]

Craik's objections to the proliferation of local commercial exams and certificates were clear from private communications. His public pronouncements were more subdued, but the message remained the same. Late in 1901 he went to Edinburgh and met with a deputation representing the Merchant Company, and the Chambers of Commerce of Edinburgh and Leith. The purpose was to impress upon them that the efforts of the SED would never succeed if businessmen did not insist upon the proper degree before awarding jobs. What was meant by 'proper degree' was not clear, however it is evident that it indicated a SED awarded certificate rather than a local one.[206]

The tension between the SED's promotion of centrally controlled uniform certificates and local bodies issuing commercial certificates independently, highlighted the need for a national standard for commercial education. The SED hoped to see the LC become a minimum standard for all students, and for Scottish businessmen to require this, or at a minimum the MC, of all their prospective employees. Yet, as reflected in the opinions of Jacks and the multiplication of local certificates, businessmen attached little importance to these measures of evaluation. The SED had not done much to help their cause. For example, in 1901 it emasculated the LC from having any commercial importance by specifically eliminating commercial questions from papers set for the ordinary certificates in French and German. While it was recognized that in exceptional circumstances it might be possible for a school to organize an advanced commercial department, papers in commercial French and German would only be entertained if the pupil first possessed a Certificate of the Higher Grade in the language.[207] This made such separate certificates a practical impossibility.[208]

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[204]"Commercial Education in Dundee; Movement by Chamber of Commerce" Dundee Advertiser. Dec. 13, 1901; "Aberdeen Chamber of Commerce. Presentation of Prizes by Dr. Farguharson." Aberdeen Free Press. Jan. 27, 1904. SRO ED7 1/10/1.

[205]Glasgow and Commercial Education." Daily Telegraph Dec. 30, 1901.

[206]See generally; "Commercial Education" The Scotsman. Dec. 17, 1901; "Edinburgh Chamber of Commerce and Manufacturing: The Scotsman. Dec. 18, 1901. SRO ED 7 1/10/1.

[207]Circular 318. Dated Jun. 15, 1901. PP 1901 XXII, pp. 325-326.

[208]The recently issued Code of Regulations for Continuation Classes did make provision for the study of modern languages in a commercial manner.

However, the underlying stipulation reflected the foundation of SED policy. While Craik and the SED fully realized the need to adapt the educational machinery of the nation to the needs of the times, it held a fundamental conviction that specialization, including commercial, could have no real educational value unless it rested upon a solid educational foundation.[209] That foundation was represented by the certificates of the SED. It was maintained that the basic disadvantage of the Scottish student in comparison to his international rivals was the practice of removing them from school at too early an age. Therefore, the ideal situation in the opinion of the SED would be for the student to complete a MC and then specialize in Continuation Classes.

The problem that arose was simple. The business community wanted to see any training and education done within the bounds of school, and be finished at a relatively young age so they could begin a practical training in the offices. Principal Mackay, speaking of the obligatory courses required by the London Chamber of Commerce certificate scheme, said that all the preparation for the obligatory subjects could be given in school.[210] R. C. Miller of the Edinburgh Chamber of Commerce said that the real question to be addressed was whether boys would continue to be trained in offices and shops.[211]

Part IV: The SED Resumes Leadership; Craik and the New Commercial Leaving Certificates.

Craik and the SED heard the calls for improvement in the education of boys entering a mercantile career. In his annual report of 1901 on Higher Class Schools and the Leaving Certificate he acknowledged that for some time there had been a growing dissatisfaction in Scotland concerning the education of this group of pupils. Craik interpreted this as a thoroughly healthy sign reflecting the realization among businessmen of the supreme importance of a sound mental training.[212] However, Craik was equally quick to chide these same businessmen about their practice of taking boys into employment at 13 and 14 years of age. He wrote in the report:[213]

> The educational machinery of the country can never have a fair chance until merchants in a body set their faces against the practice of putting boys into business at 13 or 14, and until, in their selection of apprentices, they give preference

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[209]Ibid.
[210]"Commercial Education in Dundee."
[211]"Edinburgh Chamber of Commerce and Manufacturers." The Scotsman. Dec. 18, 1901. SRO ED 7 1/10/1.
[212]"Report For 1901; Inspection of Higher Class Schools and Leaving Certificates" PP 1901 XXII, pp. 285-86.
[213]Ibid.

> and reasonable encouragement to those who can produce evidence of having profited by their school training.

While it was evident that Craik was aware of the local initiatives, there is little clear evidence that the SED was directly motivated to introduce its own commercial certificate by these moves. Outsiders often spoke of the danger a multitude of local certificates poised to the country, and urged the SED to create a national standard for commercial education. There was also evidence that Craik distinctly disliked and disapproved of the proliferation of local commercial certificates, and preferred that the MC should act as the national standard. A shred of evidence was in the communications between Jacks and Craik, described above, in which Craik urges the Glaswegian to put his Chamber's certificate plans on hold until the SED has had a chance to "mature" its own initiatives. However, it can not be proved that local actions in Scotland's cities forced Craik to introduce a commercial certificate, although it is logical to assume so.

By the time that the Commercial Certificates were adopted by the SED it can be argued that a consensus as to what commercial education entailed had been lost. John Harrison, felt that by 1904 the term was meaningless. The Educational News commented on one of his speeches:[214]

> 'Commercial Education' has...become a slang term, and he therefore prefers to denote what he designates as 'Modern Education.' A course founded on English, Mathematics, Modern Languages, Science and Art is what he suggests, and he asks educationists to hammer out a scheme which shall be educational and in keeping with the 'modern' spirit of the twentieth century.

This re-evaluation of the very term came after an appeal by Harrison, now Master of the Edinburgh Merchant Company to teachers and others "to aid in settling a new and 'modern' curriculum for secondary schools."[215] While he recognized that progress had been made since 1900 on the issue of commercial education, it was also pointed out that most of the issues raised in the previous address had not been settled. The only real progress had been in distinguishing commercial education from providing "snippets of Shorthand and Book-keeping, set off with a garnishing of Typewriting and Office Routine." Rather, "Something more substantial is needed for the sustenance and growth of youthful intellects."[216] Thus, the Commercial Certificate from the SED could also be viewed as an attempt by the SED to clearly define what was the essence of a commercial education.

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[214]"The Week." EN Jul. 30, 1904, p. 546.
[215]Ibid.
[216]Ibid.

It was in this environment that Craik and the SED issued Circular 375 on the 28th of January, 1903 establishing for the first time a national commercial certificate.[217] Previously they had issued Circular 358 asking for input as to the nature these certificates should take. While Craik admitted that replies to that circular had been few in number, he was still confident that they expressed opinions that were representative of Scotland as a whole.[218] Thus, he presented the certificates with the confidence that they embraced the general mood and desire of the country.

The new Commercial Certificate was to be a "group certificate." This meant that it would be evidence that the possessors had not merely completed isolated course work, or passed disparate examinations. Rather, they had completed a systematic course of studies and had "reached a certain stage in a course of sound educational training fitted to develop their intelligence and prepare them for the work of life."[219] Thus, it presupposed the existence of definite and well planned curriculum through which the student could pass. Yet, the SED did not lay down a uniform curriculum for the certificates. Input on just what a curriculum should entail had been very different from locality to locality. This may have been understandable. Indeed, Craik expressed the view that the SED had never intended to set forth a rigid uniform course of studies. Rather, "If the special Department is organised, then my Lords will be prepared to consider any proposal for a curriculum."[220]

This stance was in response to the wide difference in the needs of various areas, and, therefore, represented a desire to be flexible and meet the needs of each individual locality. Thus, it was left to individual schools to draw up an appropriate curriculum, in consultation with Chambers of Commerce, other interested persons, and the commercial community in general, and then submit them to the SED for approval.[221] Nonetheless, even though different schools could prescribe different requirements it was hoped that the certificate would obviate the need for the multitude of local certificates.

Almost from the beginning the Commercial Certificates of the SED were a failure. In the year following its inception the number of students taking examinations for it were negligible. More disappointing, even the numbers taking the certificate examination in individual courses were extremely low, and the percentage of passes a matter for consternation. For example, while there were over 11,000 students

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[217]The circular also laid down the guide-lines for Technical Certificates. These are discussed in the section dealing with technical education.
[218]Circular 375. January 28, 1903. PP 1903 XXII, p. 406.
[219]Ibid.
[220]Ibid. p. 407.
[221]Ibid. p. 408.

presented for the Leaving Certificate examination in English achieving a passing rate of 63%, there were only 12 candidates in Commercial French with only 30% passing. For Latin there were 3,365 candidates for the examination, but only 2 each for Commercial German and Spanish.[222]

Commentators from the SED spoke hopefully that in time the numbers would increase for the group certificate, yet for individual subjects they often admitted that there was little if any interest or prospect for growth. In reference to Spanish it was written: "There are no signs of any growth of interest in this important commercial language."[223] Craik's report in 1905 was not much more encouraging. For the whole of Scotland only four schools had submitted a commercial curriculum for approval, of those three had it approved. Craik stressed again the need for co-operation with local business communities in Scotland so that the certificates gained the all important 'practical recognition'.[224] Yet, there seemed to be few schools interested in adopting a programme with or without the input of the business community.

One might assume that in the year of introduction, and the following year, numbers would be low as schools and pupils responded to the new certificate. However, that was not the case. In his report for 1906 Craik's successor John Struthers, had no news that could be construed as evidence of success. The number of schools presenting candidates for the commercial remained a mere three. More telling was the fact that of the eleven candidates ten failed. It should not be forgotten that these were conditions set out by the managers of the very schools presenting the candidates, and simply approved by the SED. Struthers had little to say on the matter. Rather, he opted to state the obvious, "It is clear that the whole question of Commercial Education has been as yet but imperfectly threshed out by those most deeply interested."[225]

The passing of the years did not rectify the situation. In 1907 there were only ten candidates for the certificate, and only two were awarded.[226] The examination results in subjects such as Commercial French and German were also disappointing; reflecting both low subscription and pass rates. In 1908 the number of candidates for the certificate remained exceeding low although the percentage of passes was higher--

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[222]"Report on Secondary Education" Craik, PP 1904 XXII, pp. 25-28.
[223]Ibid., p. 29.
[224]"Report on Secondary Education" Craik PP 1905 XXIX, p. 965.
[225]"Report for the Year 1906 On Secondary Education" Struthers, PP 1907 XXIII, p. 897.
[226]"Report for the Year 1907 On Secondary Education" Struthers, PP 1908 XXVIII, pp. 927-28.

ten candidates and six passes. In the same year there was not a single candidate for Commercial French or German.[227]

By 1908 Struthers was fully cognizant of the frustration accompanying commercial education, as very little had changed from the tenure of his predecessor. While Struthers recognised the importance of the subject and the certificate, he was confronted with the same problems; especially in terms of lack of business support. He, like Craik before him, often lashed out at the business community of Scotland. The following, from his 1908 Report was fairly typical:[228]

> matters will never be put on a really solid basis until business men give the whole problem much more earnest attention than it receives at present from any but the very select few who are familiar with what our most formidable rivals in trade find well worth their while to do for the training of the future merchant.

Struthers seemed discouraged at the end of 1908, and resigned to the fact that the quest for a viable national standard for, and promotion of commercial education was lost. He wrote that, "any interest their may be in the teaching of Commercial Subjects flickers but feebly."[229] His foresight was correct. In 1911 Struthers reported that "signs of real interest in the matter are very few indeed." The most encouraging sign being the one candidate that presented himself for examination in Commercial French. The Commercial Certificate would survive in this feeble state for a few more years. In 1912 only one school in the whole of Scotland was reported to have in operation a specially approved Commercial course leading to the Leaving Certificate.[230] Pupils would continue to be presented with regularity for examination in single subjects such as Book-keeping and Commercial Arithmetic, but after this time it is fair to consider that the Commercial Leaving Certificate was, for all intents and purposes, finished as a viable group certificate and standard of attainment.

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[227]"Report for the Year 1908 On Secondary Education" Struthers, PP 1908 XXIX, p. 32.
[228]Ibid.
[229]Ibid.
[230]"Report on Secondary Education for the Year 1911" Struthers, Reports & c. issued in 1911-12. p. 45; "Report for 1912" Reports & c. issued in 1912-13. p. 52.

Part V: Conclusion

It could be argued that the failure of the the SED Commercial Certificates can be explained quite simply: it was the lack of interest of the students. Businessmen and teachers often complained of the low levels of motivation found among the new generation of students; their inordinate love of sport and pleasure, rather than devotion to learning. Some openly feared the apathy of students destined for commercial careers. At a meeting of the Glasgow Chamber of Commerce one speaker commented on what he most feared:[231]

> the apathy with which so many young men regarded the necessity for being equipped for commercial life. If they found their certificates as valuable or even as necessary to success as the diplomas of doctors, lawyers, and clergymen, he was sure they would bestir themselves, and the movement would be successful.

To accept this explanation would be wrong. It is much too simplistic and fails to consider the very nature of the certificates, and other dynamics that effected their success or failure. While this may have been a minor factor, it also fails to recognise that students by and large prepared themselves for their future life as it was dictated to them.

A more comprehensive explanations was that they were put on a footing equal to that of the Leaving Certificate. Thus, the SED placed the certificates in the wrong sphere of the educational system. Secondary schools had never been the avenue for teaching commercial topics. History and the attitudes of teachers and students in this area all indicated that a Leaving Certificate in commercial education was bound to fail from the outset. In addition, the secondary school retained its pupils until the age of 17 or 18, an age well beyond what businessmen considered desirable for its applicants. Finally, those pursuing secondary education generally aimed at continuing their studies at a University. Scottish Universities had failed to fully embrace the idea of commercial education. Thus, in most cases it would have been incongruous for a secondary school student to pursue the path of commercial studies.

In contrast there is ample evidence to indicate that commercial subjects were prospering in the Continuation classes (discussed more in Chapter 6); not surprisingly as this was the stream of the Scottish system which catered to those students more likely to be interested and receptive to such courses. Early after the institution of the new Continuation Class Code in 1901 it was reported that the most successful attempts at grouping subjects had been in the case of the commercial courses. In

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[231] "Glasgow Chamber of Commerce." EN. March 2, 1901, p. 154.

1902, J. M. Wilson, a school inspector in the Southern Division, commenting on the progress of commercial topics in continuation classes reported that:[232]

> shorthand and book-keeping were exceedingly popular subjects, and very well taught. 'The teachers are, as a rule, specialists whose daily occupation in offices makes them thoroughly acquainted with business requirements in these branches. That the instruction was suitable was evident by the certificates gained by the pupils in such competition as the 'London Society of Arts', and 'Pitman's Speed' Examinations.'

Similar reports echoed this sentiment throughout the years. In 1905 inspectors reported that the Commercial Course was one of the most popular. In addition, this course was often able to recruit businessmen from the various communities to lend their practical knowledge to the classes.[233] On the eve of the Education (Scotland) Act of 1908 the reports remained encouraging. It was also noted that the discipline in these classes was better than the average and the work was more methodical.[234]

It is not clear why the commercial certificate was placed in the secondary arena, but it is safe to assume that the SED had not openly discussed this venture with the schools which would be taking part. Indeed, when the circular announcing the new curriculum arrived at the high schools many openly revolted. Refusing to implement it, or simply ignoring its recommendations, Scottish secondary schools saw the Commercial Certificate as not only a gross departure from their traditional role, but also often as simply not of their concern. The Directors of Dundee High School took the SED circular under consideration in early 1903. They responded as if they were befuddled by the very concept. They stated: "at present boys leave the High School at the age of fourteen to enter manufacturers' offices, only those contemplating a university education remaining after that age."[235] Several of the Directors stated openly that they considered the SED's scheme impractical. The School Board of Stirling reacted in much the same manner. The Chairman of the Board told a meeting that he did not think there was any necessity for the proposals of the circular in the High School. He added that to carry out the circular would involve a "very large outlay for one thing, and they would not have sufficient accommodation for such classes, and altogether it would lead to the reconsideration of the High School arrangements."[236]

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[232]"Report for the Year 1902" HMI Stewart. PP 1903 XXII, p. 697.
[233]"Report for the Year 1905" HMI Scougal, p. 679
[234]"Report for the Year 1907" HMI Scougal, p. 753.
[235]"Notes From the Provinces" EN Feb. 14, 1903. p. 124
[236]"School Board Meeting, Stirling" EN Feb. 14, 1903, p. 116.

Craik struck back at the these views in 1904. During the course of opening new buildings at the Burgh School, Kirkwall he challenged the long accepted notion that the role of the secondary school was to provide for those going on to the university. Craik remarked:[237]

> In the past they had been accustomed to consider that the work of the secondary school was to train for the Universities. Now...modern conditions and modern needs...had been ever changing, and there were other spheres calling for brain power and highly trained faculties.

He urged the secondary schools that disregarded attempts to mould a new direction to change tack, and recognise that it was their responsibility to train more than those pupils destined for the learned professions. This was the function of the circulars. Finally, as a parting shot to his detractors, Craik called into question their motives, integrity, and usefulness. He stated:[238]

> It was to help them in that task the Department had issued a number of those much maligned circulars with which they had been accused of flooding Scotland. Those circulars had been the subject of a good deal of abuse, both in Parliament and out of it. He wished they had been the subject of much criticism. That was exactly what he had desired, but had not found...Few, however, of the condemners had taken the time to read the circulars, and unfortunately for the Department they entirely failed to give them any definite criticism.

Although a section of the business community openly called for and encouraged more modern and specialized commercial education, the majority gave no credence to the notion. This was a function of two traditional prerequisites they placed on hiring boys. First, they wanted them at a young age, and second they felt a basic elementary education was all that was required. It was preferred that any additional required education or training take place in the shops. Furthermore, testimony at the Edinburgh-Leith Chamber of Commerce hearings made clear that there was no system of incentives in the business community to encourage boys to stay on and complete specialized commercial courses.

Thus, the gulf that commentators spoke of between the tradition of general education in the schools of Scotland and the need for specialized training is made apparent. High Schools did not address the issue of commercial education as one of "reform". Rather, as witnessed in the case of Dundee, most took the position that commercial education was not a part of their remit. Businessmen fit much the same

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[237]"Sir Henry Craik at Kirkwall." EN Sept. 17, 1904. pp. 667.
[238]Ibid., pp. 667 & 670.

mould. Testimony to the Edinburgh and Leith Chambers of Commerce and hiring practices were evidence that few were truly eager to break the time honoured tradition of hiring young boys with a general elementary education and then training them "in house".

Thus, the Scottish tradition of favouring and encouraging a general elementary education for those citizens that progressed into the business and mercantile community may have been the true death blow to Commercial LCs. It should not, however, be forgotten that it was not simply this tradition of general education that worked against the cause of commercial studies. It was also the long embraced principle that a classical curriculum was far superior. It must have been very disconcerting for those who were trying to expound the benefits of commercial education that someone as prominent in Scottish education as Lord Balfour of Burleigh came out against it. Indeed, he voiced his opposition to even the promotion of modern languages over the classics. This was the man who would manoeuvre any Scottish education bill through Parliament--indeed, he had tried many times and failed. It was written of Lord Balfour: "Plainly he is a believer in the ancient classics even for merchants and manufacturers; and although he recognises that modern languages have some value, he believes that the best businessmen are those who have most successfully studied Latin and Greek."[239]

Many disagreed with this opinion. They countered with the argument that it was the longer time these pupils remained at school, rather than the influence of Caesar and Virgil, to which they owed their superior fitness for the work of the world. "If lads could afford to remain at school long enough to lay in a good foundation of Latin for their modern studies, no one would question the value of such a system of education.[240] Significantly, the duration of their education was not a matter of choice for the majority of these students. In addition, even if it were merchants declined to take them into their offices after fifteen years of age.

It should not be forgotten that it was more than simply a matter of the age at which business hired their employees. It was the incentives they provided for such education. Early on in the debate one voice starkly reminded those involved in the debate that all the schemes and certificates would come to naught unless businesses provided incentives to additional study. First would be requiring the exam, but more important is the promise of a higher position, salary or responsibility accruing from

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[239]"The Week." EN Jan. 12, 1901, p. 43.
[240]Ibid.

holding such a certificate. With reference to the schemes of local Chambers of Commerce, and Glasgow's in particular, it was written:[241]

> The young clerk thinks first of himself; and until Chambers of Commerce offer him sufficient inducements to fit himself to pass the examination of Dr. Jacks, he will probably prefer to face something else. If able successfully to tackle the Glasgow examination he will not very highly appreciate a novitiate of message-running and kindred duties, with no definite prospects of a satisfactory kind in the future. Until Chambers of Commerce make it reasonably certain that to those who satisfy their requirements a promising career is open, the examination will rather deter than attract young men into the ranks of commerce.

Certainly the same held true for the SED's Commercial Certificate as it was placed on an even higher level than the various schemes of the the Chambers of Commerce. Many at the time clearly expressed the view that the responsibility of national schools, with regard to commercial education, was not as great as the responsibility of those in the business community.[242]

The accepted conclusion was that the preference for younger boys was a function of the low regard they had for higher formal, systematic education, as well as the tradition of training boys "in house." However, this very premise must be called into doubt if one looks at the hiring practices of many Scottish businesses. T. C. Smout in his seminal work on the Scottish people alludes to the fact that business and industry's preference for young boys was a function of maximizing low wage labour, rather than a conviction as to the proper method of training. This dynamic will be discussed in detail when examining the death of the commercial certificate's twin, the Technical Certificate.

Thus, both Jacks and Craik in their separate ways and separate spheres were working against the tide of public opinion, and the mores and traditions of the Scottish business community. The fact that Scotland was falling behind the times in commercial education in an international context reflects more the short-sighted and stubborn views of the country's businessmen, rather than its educational leadership.

The issue of central versus local control was the other prominent feature of the debate over commercial studies during this period. The entire ordeal of the Glasgow Commercial Certificate was at its core a struggle of Craik and the SED in London versus local control by authorities in Scotland. Indeed, it is more significant for what it demonstrates about this dynamic than any educational outcome. In the end, through

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[241]"This Week." EN Mar. 9, 1901. pp. 175.

[242]See, for example, Duncan Cameron's speech to the Edinburgh Branch of the EIS in 1901. EN Feb. 23, p. 144.

the mechanism of Continuation Classes, most issues of commercial education including the awarding of certificates remained on a local level. Through the discussions over the Glasgow certificate it was obvious that Craik believed that control had to rest with the SED in order for commercial education to not only prosper, but also gain a degree of prestige. His motivations may have been honourable, for example a common national standard rather than a multitude of differing local ones, but Craik had no true conception of the wants or attitudes of Scottish businessmen. He may have realised that they were worried generally about the level of education that their employees brought to work. However, Craik never fully understood the complexities of their traditions, biases, and needs. In personal communications with Jacks it became obvious that Craik thought and spoke in a different arena, that of the educationalist and bureaucrat. His placing of the Commercial Certificate on par with the Leaving Certificate was simply a manifestation of this lack of understanding.

With one hand the SED encouraged local initiative, and with the other it often smothered it. Local certificates were seen to be not only counter productive, but also a threat to SED control. In addition, Craik believed local certificates would undermine the legitimacy of the SED sanctioned Merit and Leaving Certificates. It is even doubtful that Craik and the SED understood why the certificates it had worked hard to create were not acceptable to businessmen in Scotland as a means of evaluating new employees.

In the correspondence between them, Craik and Macdonald expressed an almost patronising attitude toward businessmen in the cities of Scotland. Despite their public pronouncements to encourage co-operation with business and industry, it was obvious that they did not hold this contingent in a very high regard. What was most telling, was that when businessmen such as Jacks did try to co-operate and provide input on the issue of commercial education Craik and the SED were more likely to assume that it was they that did not understand the intricacy of education and the work done in London. In short, the SED in this instance was not terribly receptive to the input it encouraged once it was received.

This attitude was not entirely unreasonable. By the turn of the century businessmen and industrialists were widely regarded as being almost enemies of educational reform. This was true with regards to technical education discussed in Chapter 4, as well as commercial. Often perceived as placing short-term profits before the long-term good of the nation, businessmen were rarely at the forefront of reform. They were seen as recalcitrant to outside influence on their methods of doing business, and stubborn in the face of calls for changes in working hours and educational requirements. And, by and large this view was supported by the evidence.

While this does not justify the attitude of the SED towards business interests, it does however explain them. Indeed, even local educational authorities complained about this state of affairs. The fact that even when commercial education did gain something of a foothold in the Continuation Class system it was relegated to night classes when many students were tired from a long day's work was a result of business's stubborn refusal to allow time off during the day. Furthermore, businesses failed to provide adequate incentives for further education by awarding higher wages, a higher starting position, or quicker advancement. It was left to individual local School Boards to devise inventive schemes to not only get students to enrol, but also encourage good work and attendance. Any co-operation had to be achieved by a multitude of local Boards one business at a time. An investigation of technical education proves even more damning of industrialists in Scotland.

Chapter 4: Technical Education

Part I: Introduction; Overall Problems With The "System".

One of the enduring problems and difficulties of discussing "technical education" in Scotland during this period is that the topic lacked a clear or concise definition. For example, commercial education was often considered a branch of technical education, as were agricultural courses such as dairying. Similar to the debate over commercial education, many commentators on the issue of technical instruction considered it to be a function of making education as a whole more "modern." By this was meant an emphasis on the teaching of science and modern languages, and a continued commitment to a general education rather than any specialized instruction directly related to training pupils for industry. Even those individuals who were advocates of technical education, and keenly aware of the international competition the country faced, often fell into this category. For example, in an address in 1902 it was stated:[243]

> It is on the soundness of her general education, not upon her specialised studies, that the mental supremacy of Germany is founded...it is in realising this fact that the industrial supremacy of Germany depends--the true method is to encourage and to endow the search into Science, and have faith that the inventive energy of our sons will in due time discover the practical applications.

Individuals who supported this view of technical education often discounted altogether the value of practical subjects, or an education aimed purely at training youth specifically for an industrial career in a school environment. It must not be forgotten that a large number of the leaders of the industrial community also discounted the importance of practical studies, as well as any other type of specifically "technical education." For these groups, any improvement in the "technical" or "industrial" training of Scottish youths should take the form of a more thorough and solid general education. Or at the very least, the general education of the country had to be addressed before taking up the question of technical education.[244] Yet, something approaching a majority of those in the educational community, if not the work world, recognised that the concept of technical education had to change with the times, and that something other than a purely general education was required. It was written in 1901 that, "Fifty years ago a good general education qualified for a beginning in many

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[243]"Efficiency In Education." Ramsay, G.G. [Prof. of Humanity, University of Glasgow] Pamphlet #17, pp. 28 & 33, (Glasgow, 1902).
[244]"Technical Education" Stewart, C. EN Apr. 15, 1910, p. 376.

walks of life. To-day [sic] special training is essential everywhere; and it is daily becoming more so."[245]

Thus, in searching for a foundation from which to discuss the topic it is fundamental that one determine the parameters by way of a working definition of the topic. In this regard the Englishman Henry Cunyghame provides some guidance. England had a more mature "system" of technical education than Scotland at this time. Thus, it is credible to look south of the border for such a definition. Cunyghame wrote in 1901 that technical education had as its main objective the making of good industrial workmen. In turn he set out five criteria or "technical qualities" that made such a workman. These were: inventive or constructive power, artistic feeling, knowledge of the principles of science and art, knowledge of how to apply these principles practically, and hand or manipulative skill.[246]

Of these five qualities he conceded that the first two were mostly endowed by nature, but could be improved through training. The third and fourth were deemed to be the "core" of a technical education. Cunyghame argued that practical training without a solid foundation in the technical principles that supported them was, while not worthless, only of limited use to the nation. He pointed out that it was only through knowledge of scientific and technical principles, coupled with practical skill that invention could be made. Thus, practical training was indispensable to sound technical education.[247]

Cungyhame also outlined how such an education should be imparted to the student. He identified three inter-related stages of instruction. First, there was the theoretical stage, leading on to the semi-theoretical in which the application of the "theoretical truth" is put into practice. This was to be followed by actual practical instruction in the art itself. Teachers were encouraged, when dealing with a group of intelligent workmen, as opposed to men of higher education, to demonstrate by practical example the need of the investigation. This was followed by a gradual pursuit of the investigation itself. The over-riding rule was to "proceed from the known to the unknown, and so far as possible to show the dependence of what is taught upon wide general principles."[248]

From this a definition of technical education during the period can be determined. First, it should have as its central objective the training of intelligent workmen for the industries of the country. Second, it should incorporate training in

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[245]"The Week." EN Jan. 26, 1901, p. 75.
[246] "Technical Education: What It Is" Cunyghame, H. The Technical Educator: An Encyclopedia of Technical Education, Vol. 1. (London, 1901) p. 1.
[247]Ibid., pp. 1-2.
[248]Ibid., pp. 2-3.

the general scientific and technical principles that were the foundation of the trade or pursuit. Third, it should always lead to a practical application of the theoretical knowledge gained. Thus, disparate areas of education such as commercial and agricultural studies fall outside of true technical education. Also, purely academic training without instruction in practical applications did not qualify as "technical education." It is from this constructed definition that this study will pursue an examination and analysis of technical education in Scotland in the years under consideration.

Even given this working definition of "technical education" problems remained. First, where in the overall educational system should this type of education fit? Craik himself often appeared to be confused as to the position of technical studies in the framework of Scottish education. Early in 1895 he wrote that technical work should be intertwined with elementary studies, and thus linked to the general intellectual training of the pupil.[249] However, in the same document he backs away from the idea of any type of specialised studies at the elementary level. Rather he advocated that "technical training must be treated as only one branch of secondary education, and it must be dealt with as a part of that education."[250] Throughout this period technical education would struggle to find its proper place in the Scottish education system.

A closely related difficulty in discussing technical education in Scotland during this period was the perpetual argument over when technical training should begin. The prevailing view, as discussed in the section on commercial education, seemed to favour a pupil undertaking a complete and thorough course of general elementary studies without any distinction as to their future life. Therefore, except for the issue of modern versus ancient languages, it can be said that there was a consensus that all children should follow a general course of study to at least the Merit Certificate stage, and perhaps for a year or two thereafter. Or is it? A vocal minority kept the debate from being resolved. For example, one commentator wrote:[251]

> What is practical must take precedence of [sic] what may be ideally best. The future knights of industry must be early familiarised with their life's work...Culture, apart from the business of life, will go on increasing while life lasts; and to those of whose professions it is not a necessary ingredient--nay they are the great majority--it is little short of a crime to keep them grinding at knowledge they will never use, when

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[249] State Education: Its Scope and Responsibilities. Craik, H. (London, 1895) p. 11.
[250] Ibid., p. 12.
[251] "The Week." EN Jan. 26, 1901. p. 75.

> they should be acquiring the knowledge essential to their destined callings.

Others, while they were willing to concede that the workshop would have to complete the training, emphasised that the school must lay down a sound scientific, as opposed to purely "cultural" foundation. Yet with the death of the old apprenticeship system (discussed later), many commentators saw the schools assuming the position that the work place once held in the industrial and technical training of future workers.[252]

Problems only accrued further when one attempted to discuss the "system" of technical education in Scotland during these years for there was truly not any semblance of a system. One commentator described the situation in the following manner: "The want of organisation is the pervading weakness of our educational system and that weakness is specially prominent in connection with technical education."[253]

There was a mechanism in place for localities to promote technical education through the provisions of the Technical Schools (Scotland) Act of 1887 which allowed school boards to establish technical schools. However, communities rarely took advantage of this legislation, despite the fact that the Act was quickly followed by a SED circular encouraging Scottish School Boards to establish "secondary technical schools" that would provide instruction tied to local industries and commercial concerns.[254] In 1890 the Local Taxation (Custom and Excise) Act provided funding through the "residue grant" or "whisky money" for boards that wanted to establish such schools. However, as late as 1894 the SED reported that school boards throughout Scotland still appeared "to hesitate about enlarging their sphere of action by making use of the provisions of the Act."[255]

Statistics for the year 1893-94 showed that counties and burghs often took advantage of the funds available under the 1890 Act but rarely for actually providing technical education. Of £21, 713 16 9 appropriated for the purpose of technical education £19, 339 6 5 was used by local authorities. However, only £9, 525 10 1 was actually used to directly supply technical education. Instead, the funds were used for a variety of other purposes including relief of rates, scholarships and exhibitions, expense of administration, and grants to schools other than purely technical ones. Over half of the local authorities did not even use all of the funds available to them for

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[252]Ibid.
[253]Ibid.
[254]"CCES Report for 1887-88" PP 1888 XLI, pp. 90-95.
[255]"Report for 1894" Craik, PP 1895 XXX, p. xxxi.

any purpose whatsoever, while several including Kinross and Stirling used all of the funds solely for the relief of rates.[256]

This state of affairs continued throughout the years. In 1898 it was reported that although school boards and other local authorities had the opportunity to establish technical schools under the Scotch Code[257] few did, and they remained "hesitant" to utilize the Technical Schools Act.[258] By the turn of the century the situation had improved to some degree, but was still far from ideal. During 1900-1901 session the amount available for technical education had increased quite significantly to £81,958 13. However, out of 85 Burghs only 21 applied the whole of the grant to the supply of technical education, and of 121 Police Burghs only 32 did so. The percentage, however, was better with regards to the 33 County Councils, with 26 applying the whole of the grant to technical education.[259]

After initial improvements at the beginning of the century in the amount of money allocated to local authorities for technical education the situation began to deteriorate. During the 1903-04 session the amount available had dropped to £69,712 2 7, with the majority being expended upon technical studies. However, the figure of £59,818 2 6 included nearly £13,000 handed over to Secondary Education Committees without specific guarantees that it would truly be spent on technical education. Furthermore, the number of Burghs devoting all of the grant to technical instruction remained disappointing; 20 of 85. In comparison 24 Burghs devoted the whole of the grant to the relief of rates. The situation was once again worse for Police Burghs, with only 32 of 120 devoting the whole amount to technical studies, and 52 using the grant solely for the relief of rates.[260]

In addition, doubt was cast on whether the money that was designated as being used for technical education was actually put to its proper and best use. Craik's report

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[256]"Return showing the Extent to Which, and the Manner in Which, Local Authorities in England, Wales, and Scotland, & Ireland are Applying Funds to the Purpose of Technical Education." Part II Scotland. PP 1895 LXXVIII, pp. 112-147.

[257]Chapter VII of the "Scotch Education Department's Code for Day Schools" allowed a school board to resolve that it was "expedient to establish a technical school as defined by the Technical Schools (Scotland) Act, 1887." It could take the form of a day or evening school, or a department thereof. In submitting their resolution to the SED the school board had to state: (a) the circumstances connected with the industries of the district, (b) the subjects to be taught, and (c) the scale of fees to be charged by the school. Other than this, there were no requirements made of the board in an effort to allow maximum freedom to the local authority. In addition, two or more authorities could combine for the purpose of providing and maintaining a technical school. PP 1900 XXIV, pp. 188-189.

[258]"CCES Report" PP 1898 XXVIII, pp. xxxvi & 82-83.

[259]"Return showing the Extent to Which, and the Manner in Which, Local Authorities in England, Wales, and Scotland, & Ireland are Applying Funds to the Purpose of Technical Education." Part II Scotland. PP 1902 LXXXVIII, pp. vi-vii.

[260]"Return showing the Extent to Which, and the Manner in Which, Local Authorities in England, Wales, and Scotland, & Ireland are Applying Funds to the Purpose of Technical Education." Part II Scotland. PP 1905 LXI, pp. vi-vii.

for the year 1901 called attention to the fact that local authorities did not carefully discriminate between money used for elementary instruction, classes "designed mainly to afford a pleasant evening occupation," and sound technical instruction. While it was recognised that the latter may draw far fewer students, it was deemed that the instruction would "be of greater economic value to the nation."[261]

There is little explanation for why this situation persisted. Early in the period Craik had proposed that the hesitancy on the part of local education authorities was due to their desire to consider the question of technical education not as a separate issue, but rather in the greater context of higher education as a whole.[262] The fact that he made this statement in 1894, seven years after the Technical Schools Act had come into effect, tends to raise suspicion as to its validity. However, even if it was true it does not explain why the situation should continue well into the next century. In years to come official reports offer no explanation, other than to reiterate the well known fact that school boards and other authorities seemed hesitant to develop technical education schemes, and seemed not to appreciate the importance of this field of education.

The traditional bias of school authorities for literary and classical studies provides another possible explanation. In 1897 F. G. Ogilvie of Heriot-Watt College wrote to Craik after a meeting of the Scottish Association for the Promotion of Technical and Secondary Education. The Association had concluded that more schools would take up the teaching of science and technical subjects if they could be convinced that it could be done "without sacrificing the Literary Education they provide."[263] Furthermore, the issue of "trade education" was described as a "thorny subject" for institutions to address. Olgivie was equally adamant that this field would only prosper if the confidence and co-operation of businessmen and industrialists was gained.[264] Thus, two additional explanations for the schools' reluctance were the bias for literary and other traditional studies, and the lack of enthusiasm of Scottish employers.

Despite the reluctance of many local authorities to implement schemes for technical education, any system that did exist was on a local or regional level, rather than a national one. For example, in Linlithgowshire a new scheme for technical education was introduced in 1901. The scheme, drafted by the County Education Committee, provided for technical classes in centres in Linlithgow, Bo'ness, Bathgate, and Broxburn for several months each year.[265] Also, some communities did indeed

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[261]"Report for 1901" Craik, PP 1901 XXII, p. 30.
[262]"Report for 1894" Craik, PP 1895 XXX, p. xxxi.
[263]Letter to Craik from Olgivie. Dec. 8, 1897, ED7 1/10/1.
[264]Ibid.
[265]"Miscellaneous." EN Aug. 24, 1901, p. 594.

establish technical schools. Despite a lack of local enthusiasm for the project, and nearly two decades of debate a technical school opened in Dumfermline in 1899, though it was funded largely by the Scottish-American industrialist Andrew Carnegie.[266]

Carnegie also funded the Sutherland Technical School at Golspie, and filled a void left by the noticeable absence of widespread industrial financial aid and support of local Scottish efforts. There were exceptions such as the borders woollen manufacturers who set up a technical school at Galashiels,[267] and the coal miners of Fife. Yet, despite these exceptions, as a rule Scottish industrialists remained disengaged from the issue of technical education and absent from its funding. Most noticeably, the core of Scottish industry, the shipbuilding and engineering industries of the West, fulfilled no appreciable role.

It may have been in Glasgow that a scheme for technical education was most systematic and complete. Glasgow had a School Board engaged in the issue, and its Committee on Evening and Science Classes was convened during this period by the eminent Dr. Henry Dyer, who was acquainted with foreign technical education from his experience working in Japan. Indeed, while recognising the work of other institutions, the Glasgow School Board insisted that they should be the sole authority. They stated: "The Board had now every facility for carrying on their work, and there was no reason why money should be wasted doing it elsewhere."[268] Yet, even this was no replacement for a systematic national scheme of technical instruction. As MP from Haddingtonshire, Haldane commented during parliamentary debates that while he agreed that more technical education was required in Scotland, the paramount issue was the co-ordination of the various "systems" of education in the country.[269] The situation may have been best summed up as follows:[270]

> No two sections of it dovetail into each other; and the result is a jumble of more or less independent units of operation...The grammar school does not fit into the technical school... When a 'cultured' boy exhausts the learning of his school, there is no provision for bringing him in touch with practical training of any kind; and if his parents are not in a position to set him on the rails of a particular calling, it is a matter of accident whether he will ever get in a remunerative groove...just as the necessary measure of Latin and Greek directly leads to the University

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[266]See Generally, EN May 20, 1893, p. 335; Feb. 25, 1888, p. 140 & 143; Oct. 21, 1899, p. 727.

[267]The Galashiels school will be discussed again in Chapter 7 in relation to its failed bid to become a "Central Institution."

[268]"School Board Meetings." EN Aug. 24, 1901, p. 594.

[269]Parl. Deb. 4th ser. Vol. 110, Jun. 26, 1902. 178.

[270]"The Week" EN Jan. 26, 1901, p. 75.

> and the learned professions, there should be an equally direct road from the school to industrial pursuits. Until that is provided the necessary supply of skilled artisans will always be a matter of accident; and culture will go on increasing the army of learned waifs and strays.

While the most progressive Scottish educational thinkers advocated a national system of technical high schools on German lines, such a scheme never came to pass. This was partly due to a general malaise regarding the issue on the local level; as the inefficient use of funds described illustrated. Also, the lack of enthusiasm and financial support of Scottish industries, especially major ones, was fundamental to the problem. Yet it can at least in part be ascribed to a general reluctance to deal with the issue in a concerted manner on the national level by officials in London. Some advocates came close to accusing the SED of negligence with regards to its lack of initiation in the development of technical schools for Scotland. Thomas Shaw (MP, Hawick Burghs) called upon the SED to take a lead in encouraging local efforts directed at building technical schools. Furthermore, he challenged Craik and SED officials to exhibit a little bit of courage when facing the Chancellor of the Exchequer over the issue of funding for construction. Shaw remarked that if the central authority did this Scotland's technical schools would be the envy of the world, instead of Scotland envying the rest of the world. Furthermore, Scotland would be able to educate its own citizens to the highest levels of technical instruction without being forced to send them abroad.[271]

In an effort to provide support for local efforts MPs such as Munro Ferguson (Leith Burghs) called upon the Government to make specific grants for the purpose of building and equipping technical schools throughout Scotland. It was often pointed out that despite urgent need for such schools, the money available was insufficient for a local authority to establish one. In relation to this proposal Shaw provided a possible explanation for the hesitation of local authorities to provide technical schools. Noting that specific grants for the foundation and equipping of such schools had ceased in 1886, Shaw explained that local authorities had taken to borrowing and had incurred a large indebtedness. The fear of debt had deterred many from developing sound modern systems of technical education. Galashiels was cited as an example of a locality that ended up with a heavy debt burden for its efforts at establishing a technical school.[272]

Despite the relative lack of progress that had been made with regards to technical schools, and the volumes of articles and speeches advocating its greater

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[271]Parl. Deb. 4th ser. Vol. 110, 167-68; Parl. Deb. 4th ser. Vol. 123, Jun. 18, 1903. 1345.
[272]Parl. Deb. Vol. 123, Jun. 18, 1903. 1343-44 & 1372.

promotion, the 1908 Act did not deal with it as an issue separate from Continuation Classes or Central Institutions. Indeed, the issue was almost totally absent from the Parliamentary debates. Only Lord Reay spoke in favour of the Act being used to encourage technical instruction.[273]

Even active School Boards, such as Glasgow's, relied to a great degree not on technical high schools per se, but rather on Continuation Classes. The traditions of the Scottish educational system were more easily adapted to this method of delivering technical education, and through them there was possibility of developing something close to a national system. The other area in which an avenue for a system of technical education existed was that of the Central Institutions, such as Heriot-Watt and the Glasgow and West of Scotland Technical College. In this case greater central control by the SED allowed a concrete and co-ordinated system of industrial education to exist. For these reasons, this study will focus in Chapters 5, 6, and 7 on the Scottish Continuation Classes and Central Institutions as the primary source of true technical education, as defined above.

Part II: The Technical Leaving Certificate, and Reasons For Its Failure

It is important to consider the troubled and ultimately unsuccessful Technical Leaving Certificate. While it is worthy of examination, the Certificate's importance laid more in an analysis of the reasons for its failure than in the impact it had on Scottish education; for its impact was quite limited. Indeed, from the time of its induction the Technical Certificate was under subscribed, and its existence was primarily only on the books of the SED.

The SED introduced the Technical LC at the same time as the previously discussed Commercial LC in 1903. In Circular 375 of that year the SED announced that it was prepared to consider, on parallel lines as the Commercial Certificates, curriculums of technical education and a corresponding Technical Certificate. As with the case of the Commercial Certificate, the SED did not lay down rigid guide-lines for what curriculums leading to the certificate should entail. Again, this reflected the desire to have the curriculum and certificate be responsive to local needs. Its only requirement was that English Composition and reading of the "standard" English authors be an accompaniment to any specialised course.[274]

The motivation behind introducing the certificate was more oblique than that of the Commercial Certificate. While there was little evidence of confrontations between the SED and local authorities over the issue of standards and certificates (as there was

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[273]Parl. Deb. 4th ser., Vol. 198, Dec. 7 1908. 21-30.
[274]Circular 375. p. 408.

with commercial studies), it can be assumed that the SED sought in the first instance to create some type of nationally recognised standard of technical competence. It may also have been an attempt to bring School Boards, such as Glasgow's, which saw themselves as the natural and sole authority for this type of education into a national scheme. Also, it should not be ignored that as the LC was firmly rooted in the secondary schools of the nation, the Technical Certificate was also an attempt to reorientate secondary schools away from their traditional curriculum and educational role. Instead of viewing the function of secondary schools as exclusively to prepare pupils for the university, it was hoped that they would now be viewed as also readying students for the higher technical work of the Central Institutions.[275]

In addition, as it left a great deal of control to local authorities the certificates were undoubtedly viewed as a catalyst to stimulating interest in the long neglected field of technical education, and encourage local authorities to take advantage of the funds available. The previous year MP Black (Banffshire) had spoken in Parliamentary debates about the need to "create an appetite for technical education".[276] The introduction of the Technical LC may have been an attempt to whet this appetite, but in retrospect the SED would have been advised to stimulate the appetite before it presented a meal few were prepared to eat.

The demise of the Technical LC followed much the same course as that of the Commercial Certificate. From its inception it was plagued by chronic under-subscription and lack of interest.[277] The passing years were accompanied by a lack of evidence of enthusiasm and little to generate encouragement for the SED. In 1903 there were only 12 students presented from the whole of the country for the Certificate and the proportion of failures was "unduly large."[278] Two years later the number had only risen to 13, and only half passed.[279] The following year saw a decrease in numbers, rather than any growth. In 1907 there were only 7 candidates for the Certificate; although the proportion of passes had increased with all but one candidate passing.[280] As with the Commercial Certificate, the passing of each disappointing year was met with words of hope that the numbers would increase and the value of the Certificate would in due time be recognised. They never did, and it never was recognised.

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[275]Parl. Deb. Vol. 123. 1331-1332. Policy as expressed by A. G. Murray, MP Buteshire.
[276]Parl. Deb. Vol. 110. 194.
[277]"Report for 1903" Craik, PP 1904 XXI, p. 13.
[278]"Report for 1904" Craik, PP 1905 XXIX, p. 965.
[279]"Report for 1906" Struthers, PP 1907 XXIII, p. 897.
[280]"Report for 1907" Struthers, PP 1908 XXVIII, p. 927.

The failure of the Technical LC can be ascribed to many of the same reasons as the failure of its cousin, the Commercial Certificate. The observations and arguments made earlier regarding the Commercial Certificate's placement on par with the Leaving Certificate hold equally true with regards to the Technical Certificate. Indeed, nearly every dynamic that affected the Commercial Certificate also bore upon the Technical Certificate.

There were also, however, a variety of factors endemic in the culture of the country and the hiring practices of the industrial employers that made this type of education difficult to promote. At the foundation was a lingering doubt that to provide the working class with anything but the rudiments of education and culture was counter-productive. For example, it was written in 1901:[281]

> It is not too much to say that so-called culture is to the working man's son but a doubtful blessing...If it only serves to raise his ideas above manual labour, without fitting him for something better, he would probably go through life a more contented man without it.

In addition, as the new century opened the traditional bias that trade or technical training was *unwelcome* in the realm of "true" education, described in part above, continued to hold sway. It was written: "Trade training they regard as dishonouring to education, and unworthy of an educated people."[282] Given that these prejudices had not been eradicated, it can not be taken as much of a surprise that employers, whether in industry or smaller work-shops, placed little importance on their charges encountering technical education.

Of more importance with regards to the Technical Certificate was the tradition of "in house training" and apprenticeships in the industries of Scotland. There was little if no tradition of technical education in the classroom for the industrial workmen of Scotland. All training of significance took place on the shop or factory floor. Much like the men of commerce, industrialists spoke with regularity throughout these years of the benefits of such a system, and of the efficiency of this type of "education". Indeed, many openly questioned the wisdom of emulating the German model of technical education by pointing out that Britain had not grown strong and reached the position it held in the world with a German system of education.

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[281] "The Week." EN Jan. 26, 1901, p. 74.
[282] Ibid.

Part III: Death of the Apprenticeship System

There was reason to question the time honoured view that employers preferred to hire younger boys and then train them in their factories and shops as a matter of "educational efficiency." In 1903 Dyer appeared before the Royal Commission on Physical Training as a prominent educationalist and long time member of the Glasgow School Board. Speaking on the question of compulsory attendance at Continuation Classes he said that legislation to effect compulsion was probably neither possible nor desirable as long as employers took no interest in the education of their apprentices and employed them only for "their cheap labour."[283] Evidence from as late as 1909 suggested that employers, especially in industry, were often motivated in their hiring practices more by the economics of wages, than any desire, altruistic of otherwise, to provide what was in their opinion the best quality training.

R. H. Tawney makes a case that in Scotland, as well as the whole of Britain, the demand for technical education was reduced, and in some places all but extinguished, from a combination of new industrial practices, the breakdown of the apprenticeship system, and last but certainly not least employers' greed with regard to lower paid boy labour.[284] Where apprenticeships remained their utility as a training device was nominal: "there is little reason to regard it [apprenticeship] as a satisfactory method of industrial training."[285]

The first circumstance that undermined these certificates was shared by the Commercial Certificates. Almost to the last those that aimed at a industrial or related career left the day school at 14 years of age, or younger when exempted. If they were to enter a trade that provided an apprenticeship they often had to wait until they were 16 years of age.[286] Thus, at least a two year gap existed between the end of formal training and the beginning of on the job training. While many of those that left at 14 became "loafers", in some cities there was plenty of work for them. Testimony before the Royal Commission in 1903 revealed that in Dundee and Glasgow boys could readily find work, although it was "deadend" and unskilled.[287] For example, of 250 boys leaving the elementary school in Glasgow over half became milk or lorry boys, a quarter became unskilled labourers, and only 12% entered an apprenticeship or

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[283]"Royal Commission on Physical Training (Scotland) Report" PP 1903 XXX, p. 311. Evidence presented to the Commission.
[284]Tawney, R.H. "The Economics of Boy Labour." The Economic Journal. 1909, Vol. XIX, pp. 517-537.
[285]Ibid., p. 519.
[286]Bray, R.A. "The Apprenticeship Question." The Economic Journal. 1909, Vol. XIX, p. 406.
[287]"The Royal Commission" Testimony, pp. 201 & 305. Testimony of R. J. Wilson (Headmaster of Kent Rd. School, Glasgow) and Rev. H. Williamson, respectively.

continued in a 'learning' capacity. Similar statistics prevailed in London as well.[288] Thus, a gulf existed between the elementary school and almost any kind of true job related industrial training. A gulf that a LC in Technical studies was ill-suited to span.

However, many of those lads that entered into apprenticeships did so without any real prospect of technical education or training. It was to this fact that commentators of the time point when they discussed the end of the apprenticeship system for training youth. Often businesses and industries had three levels of apprentices: premium, privilege, and ordinary. The latter formed the vast majority. These boys were victims of the twin spectres of specialization in industry and wage constraints. As an ordinary apprentice a boy received practically no training outside of one narrow and specific task. For example, in a locomotive works these boys would be apprenticed either as a fitter, or as a turner. Past mastering this one task they would learn nothing. One firm was quoted in 1909 as saying: "'They are not taught, they are made to work.'" One commentator remarked: "the result of it is seen in a diminution of the opportunities for workshop education." Another simply concluded: "Apprenticeship, in the old sense, is practically dead."[289]

This tendency to whittle down the education of a boy to a single process, and correspondingly decrease his opportunities for a well-rounded training was not confined to one trade or another. Rather, it was spread wide over the industrial and even commercial landscape of not only Scotland, but England as well.[290] Given this type of employer demand for narrowly specialised boys trained solely in the manner of completing a single task, it is understandable that a Technical LC aimed at providing a broader and more theoretical background in science and other subjects would fail, as would nearly any system of technical education based on such principles.

For the majority that did not enter apprenticeships the prognosis was bleaker still, and an employer's incentive for higher education, of whatever kind, non-existent. This group, generally termed "boy labourers", performed tasks or work that were completely non-educational and provided not a semblance of industrial training. This state of affairs was fairly obvious for the van boy, the messenger, and the milk boys. More disturbing is the fact that it also held true for a startling variety of industrial jobs; in other words the exact constituency that it was claimed technical education would benefit most. Listed among those positions for boys in Scotland were: "general labourers in foundries, in sawmills, in the building trade, or at the docks; loom boys, doffers, or shifters in textile factories; oven boys in bakeries, rivet boys in boiler

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[288]Tawney, "Boy Labour" p. 520. See also, Bray "Apprenticeship" pp. 404-406.
[289]"The Week." EN. Jan. 26, 1901. p. 75.
[290]Tawney, p. 521. See generally, Bray pp. 406-410.

shops, drawers-off in sawmills, packers in soap works, machine-minders in furniture factories, etc."[291]

For this segment of school leavers, though they certainly would have gained benefit in the long term, pursuing higher technical studies was both not required and impractical. The most disturbing aspect of this analysis is that the majority of these boys were not hired with any prospect on the part of the employer to keep them on in a permanent capacity. Indeed, not only did these boys receive no industrial training, but also great numbers of them would be dismissed upon reaching 18 when they would require an adult's wage. In many cases employers had distributed the work in such a fashion that, for example, a weaving factory or soap works often used more boy labourers than permanent adult males. In short, it was impossible for these employers to absorb anything but a small fraction of their youth labour into the ranks of the skilled, permanently employed adult work force. The situation was acute in Dundee where boys were used as loom boys, doffers, or shifters in the jute mills. With a predominantly female adult work-force there were few places for adult males, and almost all of these boys were dismissed at 18 years of age trained for nothing.[292]

An examination of testimony given to the Royal Commission in 1903 helped to explain the situation and the attitudes that brought it about. Called as the only businessman to testify before the Commission, William Henderson was a jute spinner and manufacturer in Dundee, as well as chairman of the Technical Institute Committee there. Henderson spoke of the problem of "loafers" in Dundee. These were boys normally of 14 years of age and above who were not engaged in either work or further education. He described them as "a standing menace to the welfare of society", and recommended that they be treated as "criminals".[293] In a series of questions Henderson explained what he believes should be done with them:[294]

> 'I think that probably the police would be the body best able to cope with them.
> 13, 292. Treat them like vagrants? Yes.
> 13,293. Have you had a large knowledge of seeing loafers? Yes.
> 13, 294. Are there a great many in Dundee? A good many.
> 13, 295. More than there ought to be? Yes...Dundee is a very good recruiting ground for the army.'

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[291]Ibid., pp. 525-526.
[292]Ibid., p. 526-529. See also, Smout, T. C. A Century of the Scottish People. pp. 97-98; Walker, W.M. Juteopolis: Dundee and Its Textile Workers, 1885-1923.
[293]"Royal Commission on Physical Training." p. 574.
[294]Ibid.

Later in a series of questions by Sir Thomas Glen Coats, Henderson is asked about the employment of boys over the age of 17 or 18. His response bears witness to the business practices described above that left boys without training or prospects at an early age. It also reveals that it is his own practices that contributed to the problem of loafers that he held in such disdain. The testimony read:[295]

> 'In the industry in which I am engaged it is difficult. We in the textile business employ a large number of girls and women, and we employ a large number of boys, but when they get to the age of seventeen or eighteen, the wages are not sufficient to induce them to remain. We have very little employment for young men.
> 13,322"And are these the lads who become loafers on the street? Yes'

As the questioning proceeded Henderson became more and more defensive. A member of the Commission tried to change the subject to a more neutral topic, but soon Coats had returned to the topic and started a series of probing questions. Henderson was asked whether able bodied young men found without visible means of sustenance should be compelled onto a training ship or some other similar institution, and replied that this solution would satisfy him. The testimony that followed deserves to be read in full:[296]

> '13,326 That meets with your approval?--Yes
> '13,327. With reference to Dundee, have you read the evidence that has been given before this Commission?--Most of it. I don't think I have read every word.
> '13,328. Have you read the evidence given by the Rev. Mr. Williamson?--Only part of it.
> '13,329. There was one matter he spoke of, and I shall read you his evidence. 'Q.--Is there anything you would suggest dealing with the very special young population [referring to 'loafers'] of Dundee, that the Commission could recommend? A.--Yes, I have long thought that the manufacturers are responsible. I hold the manufacturers have no right to take possession of these young people and place them in conditions of employment where their morality is injured. Q.--In fact they place obstacles in the way of the School Board carrying out all that it might carry out in reference to these young people? A.--I think so...they know, or they ought to know, that they treat these young people as if they were machines.'
> '13,331 You don't think that there is any practical suggestion on these lines?--No, I don't think there is any practical solution to that.'

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[295]Ibid., p. 575.
[296]Ibid., pp. 575-76.

This testimony revealed not only a distinct lack of interest in the future prospects of young labourers by an eminent Dundee industrialist, but also a complete indifference to their plight. Young labourers were worked like "machines", boys let go at an early age with no training and few prospects for further employment, and there was nothing to be done about it.

As condemning as this testimony was of the practices of the industrial community of Dundee towards male youth labour, the earlier testimony of Rev. H. Williamson revealed that the conditions were much the same, or even worse, for girls employed in the jute mills of the city. As a member of the clergy Williamson worked closely with the young members of what he termed the "neglected class". He testified that for boys it was easy to find employment up to the age of 16, but after that time "they are no longer of any use."[297] Entering work as young as 12 years of age, girls could remain in work longer, but the conditions of work were damaging. Split into a rigid hierarchy, with the mill girl viewed as inferior to the factory worker, female labour was subjected to long hours of work with no avenue for further education. The end result was that their moral and social condition was "suggestive of terrible evils." Williamson's appeals to the Dundee School Board to open special Continuation Classes for these girls had only limited success, with the nature of the employment seen as the major factor. He was not aware of any similar efforts made on behalf of boys in the same situation.[298]

There were no easy solution for the issue of youth labour, despite its deleterious effects. The Inter-Departmental Committee on Physical Deterioration found that the boy who had been employed merely as cheap labour, without acquiring some skill for future work, and who, therefore, was unfit for adult wages, was more likely to be unemployed as an adult. However, Dyer accurately pointed out in 1913 that so long as boy labour was cheap, so long it would be employed by the country's industries. Nor was it necessarily the fault of the employers alone. Dyer commented:[299]

> For many boys there is an attraction in the very casualness of the work, because of its variety and in many cases its freedom from restraint. The financial inducements both to the boys and their parents are great, as they earn more money than they would do if they were learning a trade.

The death of the traditional apprenticeship system was deemed confirmed by 1913, if not earlier. Even when a specified period of apprenticeship was laid down, as

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[297]Ibid., p. 301.
[298]Ibid., pp. 301-302.
[299]Education and Industrial Training of Boys and Girls. Dyer, H. (Glasgow, 1913), p. 19.

was still done in the engineering trades, there no longer existed a signed indenture compelling the young person to complete the course in one place. Nor was there any longer, "an obligation upon the master that he will attend duly to the education of the apprentice."[300] In addition, even positions that still retained the label of "apprenticeship" were largely non-educative. One commentator wrote, that the apprentice was no longer "educated in the mysteries of his craft" and the range of his overall experience was very limited.[301]

Dyer may have best summed up the state of apprenticeships at the end of the period. While, he admitted that "nominal apprenticeship" still existed in many trades, the subdivision of labour made it difficult, if not impossible, for the apprentices to learn the practical part of their trade in an efficient manner. As a result, at the end of their term of apprenticeship they could not be classified as skilled workers in "any sense of the term." Regarding the theoretical side of apprenticeship training Dyer wrote:[302]

> it is simply non-existent in so far as the workshop is concerned; and even when the experience there is the best possible, under modern conditions, it requires to be supplemented by instruction in schools or classes, not only in the science and art connected with it, but also in some cases by practice in other departments than those in which the apprentices have been employed; so that they may be able to take up work of the same nature but different kind, and be able to adapt themselves to changing conditions.

This latter result of the loss of theoretical and academic instruction in work floor training was perceived to be possibly most detrimental. It had a dual impact. Those individuals who emerged from the work place, often at a young age, were not able to transfer experience to a new or different job. Second, a consistent criticism levelled at Scottish workmen was that they were, when trained at all, able to do only a narrow set of tasks. Trained only in the way a single task was done, they were incapable of offering ideas of how the job could be done better. In addition, with no foundation of 'academic' knowledge they were unable to easily adapt to new techniques, tools, or production methods.

With the death of the traditional apprenticeship, many also mourned the moral impact the old system asserted on the apprentice. Gone was the personal and almost paternal relationship between master and apprentice.[303] Dyer pointed out that

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[300]"Report on Continuation Classes, Southern Division, 1913" Jamieson, Reports & c. issued in 1913-14. p. 8.
[301]"Technical Education" Stewart, p. 378.
[302]Industrial Training. Dyer, pp. 10-11.
[303]"Report on Continuation Classes, 1913" Jamieson, p. 8.

previously the apprentices had normally lived in the houses of their masters, and shared the family life. As a result their apprenticeship was not merely a training in the workshop, but also a "preparation for life in its wider aspects, and it was recognized that character and intelligence were essential elements in the making of a good tradesman."[304] This contributed to the 'loafer' and 'hooligan' mentality that many young men fell into when they were made redundant.

Part IV: Technical Education in Continuation Classes

A general discussion of the placement of specifically technical education in the Continuation Classes is necessary before undertaking a detailed analysis of the development of this area of Scottish education. C. Stewart, Principal of the Technical College of Aberdeen, commented in 1910 that apprenticeships and guilds were both gone, and for that reason the school had the duty to take up the educational work once conducted by them. In turn it was the duty of the employer to stimulate attendance at the technical work of the schools.[305] This perception was widely embraced, and it was at least in part responsible for the progress of technical education in Continuation Classes and Central Institutions. And while progress was certainly made, two caveats must be kept in mind. First, the success or failure of technical education was as much a function of local School Boards working with individual businesses, as instituting courses. H.M.I. Smith commented:[306]

> If the problems of technical education are to be tackled successfully--so, I mean, as to be an economic success, to add permanently to the wealth of the country and the well-being of the workers--boards will find themselves obliged to take into their counsels both masters and men.

Second, technical instruction was always a distinct minority of the total work done by Continuation Classes. In 1910, Stewart stated of the nearly 100,000 students in Continuation Classes, only about 12,000 were engaged in any capacity in technical education.[307] This was not entirely a negative situation. In many cases pupils of the "industrial" class had serious flaws in the general elementary education, and it certainly can not be faulted if they used Continuation Classes to correct them.

Continuation Classes also had many limitations for technical education. The session was short, and attendance was infrequent; usually 2 or 3 nights a week. Because of a lack of day classes students and teachers were often tired, and regular attendance was precarious. The taking of single subjects, much as in the case of

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[304] Industrial Training. Dyer, pp. 9-10.
[305] "Technical Education" Stewart, p. 378.
[306] "Report on Continuation Classes, 1913" Jamieson, pp. 13-14.
[307] "Technical Education" Stewart, p. 378.

commercial education, was the norm. In addition, no means was ever devised to secure that even a slim majority of students who entered the initial stages of courses continued in attendance and completed the full course. Furthermore, in some of the courses, particularly engineering, the general education of the students had provided little more than "shifting sand" as a foundation. Therefore, it was often commented that students could not fully profit from the courses.[308]

As result, despite the progress, many still called for a national system of technical education. In this regard, most commentators invoked the German system as an example. Stewart said that Scotland could not help but admire the "ceaseless care" with which the German system had been built, and there should be no hesitation in following the German model.[309] A delegation from Edinburgh visited Germany in 1911. In Cologne they visited the Meister Kurze Day Technical School and were impressed that technical education had been put on a day school footing, something that never was achieved in Scotland. Though a high school, the work was comparable to work done at the Heriot-Watt College. They also found cooperative employers. Meister Kurze offered special courses of two months' duration to which workmen were allowed to leave their ordinary work in order to improve their technical qualifications. Munich's system was more impressive. The city had four trade schools each specialising in a particular field of technical instruction. In addition, attendance was compulsory for boys, and although not compulsory for girls over 80% of girls not engaged in work or other education attended.[310]

The system of Continuation Classes in Scotland, while impressive in its own right, could not match the truly national system of Technical High Schools in Germany. The reason was often a matter of money. Stewart concluded:[311]

> In this country..we value learning for its own sake, and esteem the richness of knowledge to be acquired; we realise the need for the mental and moral discipline of school, but we have not yet accepted the proposition that education is a form of State insurance for which Britain must pay a tax comparable to that which she pays--and pays gladly--for the maintenance of an efficient navy.

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[308]Ibid., pp. 376 & 378; Industrial Training. Dyer, pp. 56-57; "Day Continuation Schools and Classes" EN Jan. 24, 1913, p. 74.

[309]"Technical Education; the Need for a National Policy" Stewart, C. EN Apr. 8, 1910, p. 347.

[310]"Report by Special Committee on Visit to Schools in England and the Continent" Sept. 1911, pp. 9 & 13. NLS 5.267.

[311]"National Policy" Stewart, p. 347.

Part V: Conclusions

With regards to many sections of Scottish industrial employers it can be concluded that real on the job learners were an expense they just as soon not incur. There was also a force at work that increased the number of boy labourers out of proportion to, and without regard for the job openings that would await them upon reaching adulthood. One employer expressed the policy most poignantly when he said, "'boys are employed for their present commercial utility.'"[312]

For this wide section of Scottish industry the desire to have boys at a young age had nothing to do with the relative merits of formal school training versus shop and factory training. Rather, their desire was based on the low wages that could be paid to them until the time they reached adulthood. Providing incentives for further study, such as the completion of a Technical LC, Continuation Classes, or other forms of formal technical education was contrary to their hiring motives and business practices. Greed, not tradition devastated this sector of Scottish youth. These motives and practices were fundamental to not only the failure of the Technical LC, but also the slow progress generally of technical education in Scotland. Despite these obstacles some progress was made in the area of technical studies within the Continuation Class system as will be seen in the next Chapters.

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[312]Tawney, p. 529.

Chapter 5: Continuation Classes: Secondary Schools For The Working Classes

Part I: Introduction & Brief History of Continuation Classes Up To The 1901 Code.

At the outset it must be recognised that Continuation Classes were not solely devoted to technical education or commercial education. More often than not they served the function of correcting elementary education, and providing further 'general' education. Even the SED saw continuation courses as a combination of general, practical, and vocational studies. Thus, it supported a balanced curriculum centred around groups of subjects often including English literature and citizenship training. However, Continuation Classes remained the logical avenue for providing technical and commercial education for the working masses in Scotland. As Scotland never achieved the hopes of those who advocated a national system of technical high schools and the Technical LC proved a failure, Continuation Classes were left as one of the few options open for the promotion of technical education, and more practical studies in general. Importantly there was also a degree of central control by the SED that allowed a more national system to develop.

Yet, Scotland's Continuation Classes lagged well behind many of its European rivals, particularly Germany, Switzerland, and Denmark. Germany was considered by most at the time to have the most systematic and successful system for the further training of the industrial classes. However, it is significant that Scotland also lagged well behind England in developing Continuation Classes and a continuation class system.[313]

By 1900 Continuation Schools had already played a significant role in English social and economic history for nearly a century. Dozens of English agencies had worked to provide and fund "further education" throughout the 19th century. These included the Young Men's Christian Association, a variety of Sunday Schools and Working Men Co-operatives, and Mechanics' Institutes in almost every major city. In the early 20th century the Workers' Educational Association helped to provide this education. The Manchester Mechanics' Institution alone had been in existence since 1824.[314] By as early as 1851 there were 610 Literary and Mechanics' Institutions

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[313]Continuation Schools in England & Elsewhere: Their Place in the Educational System of an Industrial and Commercial State. Sadler, M. ed. (Manchester, 1907). See generally, "Introduction" by Sadler, pp. xi-xxvi; "Compulsory Attendance at Continuation Schools in Germany" by Sadler, pp. 513-517; and "The Continuation Schools of Switzerland" by A. J. Pressland, pp. 548-575.

[314]See generally, Hudson, History of Adult Education (London, 1851); Reynolds, J. H. "Technical Instruction in the City of Manchester". Published in the Handbook of the Meeting of the British Medical Association (Manchester, 1902).

with a membership of 102,000 throughout England.[315] By the 1904-05 session, there were over three-quarters of a million students in further education under government inspection in England and Wales, or roughly 22 per 1,000 of the population.[316] It was estimated at the time that England and Wales had a larger attendance at such classes than any other country where attendance was voluntary. In addition, these schools were not concentrated solely in London, but rather it was spread throughout the country; with Manchester, Leeds, Halifax, and St. Helens, receiving special recognition. In contrast, the Continuation School system of Scotland had a long and often troubled history. Indeed, for many years it was difficult to even label it as a "system", as its classes were so sporadic and uncoordinated. In addition the classes in Scotland were not attended in the same numbers as those south of the border. While by 1902 there were approximately 90,000 students on the registers, or about 20 per 1000 of the population, there was only about half that number in average attendance.

The premise of the classes was simple enough: they were to provide additional education initially in the evenings to school leavers. Many participants were engaged in work and would attend after a day's labour. Some pupils attended directly after fulfilling their obligation to school, but most let a year or more pass before enroling. It was recognised that students in these classes had fulfilled their obligation to attend day school. Therefore, many commentators on the subject said that the ideal should be to have the classes provide a measure of 'secondary instruction' to supplement the elementary schooling of the child. In this way, Continuation Classes were often viewed as secondary schools for the working classes.[317] It was also recognised that the most efficient function for the classes was to provide instruction relevant and adapted to his employment and life's requirements; primarily technical or commercial. However, more often than not (as explained in greater detail below) the classes provided only additional elementary instruction.

For many commentators, if continuation education fulfilled this rather limited elementary function it had performed its service to the country. Continuation education was viewed in some quarters as more a means of curing social inequalities than fulfilling a role in the economic efficiency of the nation. At the EIS Annual Conference in 1901 one commentator said that the Continuation Schools were to rescue young men and women. It was said, "The neglected mill lad and mill girl

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[315]Sadler, Continuation Schools. p. 27.
[316]Ibid., pp. 691-692.
[317]Parl. Deb. 4 th ser. Vol. 110, Jun. 26, 1901 160. Policy as expressed by Mr. A Graham Murray, MP Buteshire.

require every encouragement, and every means should be provided for their welfare."[318] Another commentator added: "It is more a matter of teaching the young for the good of the State than for their own individual good."[319] True to the doctrine of national efficiency it was added:[320]

> No better investment of public money could be made, for every pound spent [on continuation education] 2 or 3 pounds would come back in the way of closing the doors of poor-houses and prisons.

For most, however, the important factor was the further training of pupils heading to industry or commerce, or actively engaged in them. This faction openly scorned those that believed the purpose of Continuation Classes was simply to "rescue young men and women from degradation,"[321] and openly advocated that the classes had a much higher function. Supporters of this view in Scotland took their cue from Germany. On the topic of continuation courses it was said at the 1901 EIS Annual Congress: "This country was falling behind in competition with foreign countries in many branches of industry, and the only means of keeping up in the race was by promoting higher education."[322] Thus, for the SED and others involved with Continuation Classes an immediate question to be addressed was what function this sector of the educational system was to fulfil.

Up until 1898 school leavers could continue their education in either the Continuation Schools directed by the SED, or in the Science and Art Classes under the Directory of the Science and Art Department. The two sets of classes overlapped to some degree. For example, the Continuation Schools provided elementary instruction in some science and art subjects. As a rule, however, the Continuation Schools were designed to remedy defects in the elementary education, and the Science and Art Classes were aimed at higher work. Added to these two sets of classes were independent classes, usually in technical subjects, conducted by a few Town and County Councils. From the latter students often went forward for examination by the City and Guilds of London Institute and the Society of Arts.

Reports from the beginning of the period showed that as the 19th century drew to a close Continuation Schools experienced a marked increase in number of centres, as well as the number of scholars.[323] There was also agreement that in general they

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[318]"Education Institute of Scotland Annual Conference." EN Jan. 12, 1901, p. 30.
[319]Ibid.
[320]Ibid.
[321]Ibid.
[322]Ibid.
[323]Number of centres up to 953 during the 1895-96 session from 669 the previous session. Number of students in average attendance up to 45,487 from 32,934 in the previous session. CCES Report, 1895-96. ED 34. PP XXX, p. X.

were having a positive effect on the education of the nation. One inspector stated: "The stimulus it [the continuation class system] has given to the education of scholars who have passed through the elementary schools is very striking."[324] The three dilemmas that faced the SED were to formulate a co-ordinated system for the schools, an overall strategy for continuation education, and clearly define their purpose so that they could be made to contribute in the most efficient way to the education and economy of Scotland.

Continuation Classes were always designed for a particular type of pupil. Almost without exception those who continued on to a proper secondary education or were expected to carry on to the university were not concerned with this area of education. Instead these classes were intended for those members of society that would, at best, have an elementary education and carry on not to a university, but rather to skilled and unskilled jobs in industry and commerce. A few would continue on to one of the Central Institutions. Thus, the SED had to decide first and foremost what type of education these classes would entail to best provide a better educated working class for Scotland. The first place to start was to ascertain what role they served.

Despite a hope that the Continuation Classes would act as a means to provide some type of specialized instruction in commercial and technical subjects for those entering these fields of work, they did not. The vast majority of students were enrolled in elementary classes such as Arithmetic, Reading & Writing combined, or Writing & Composition. Far fewer took commercial classes such as Shorthand and Book-keeping. Fewer still engaged in technical and science classes such as Mechanics, Chemistry, Building Construction, and Elementary Physics. For example, in 1899 there were 456 students taking Mechanics, 361 in Mining, and 10, 816 in Book-keeping. However, in the elementary subject of Writing and Composition there were 37,548, and in Arithmetic there were 47,830 students. Also, while numbers on the registers rose steadily until it reached 96,247 in the 1896 session, thereafter it fell each year until it stood at 82,190 in 1901. Table 5.1 illustrates the rise and fall in enrolment. In the case of some classes numbers fell to levels below that of 1894. Mechanic, for example, fell from 724 in 1894 to 247 in 1901, and Mining fell from 322 in 1894 to a mere 83 in 1901.[325] Table 5.2 compares attendance at specialised and elementary classes.

Table 5.1: Overall Registration and Attendance

Year	Number on the Registers	Average Number in Attendance

[324]Ibid., p. XI.
[325]PP 1895 XXX, pp. 296-301. PP 1897 PPXXIX, p. 294. PP 1902 XXXII, p. 294-96.

1895	67,200	32,934
1896	91,898	45,487
1897	96,247	50,822
1898	94,247	51,967
1899	90,450	52,340
1900	87,473	49,202
1901	82,190	43,962
1902	87,599	47,002

(Source: CCES Tables accompanying Code of Regulations For Continuation Classes)

Table 5.2:

Practical Subjects: Commercial, Science, & Technical

Year	Shorthand	Bookkeeping	Mechanics	Chemistry	Mining
1895	7,765	5,800	734	1,259	322
1896	11,962	8,288	947	1,140	389
1897	11,441	9,137	584	953	379
1898	11,250	9,372	478	865	369
1899	11,078	10,816	456	829	361
1900	10,471	9,847	623	511	N.L.
1901	10,324	8,952	537	289	N.L.
1902	11,314	9,625	247	433	83

Elementary Subjects

Year	Reading or Recitation,or combined	Writing& Composition	Reading& Writing	Arithmetic
1895	20,047	37,548	8,964	47,830
1896	27,330	49,804	12,197	61,258
1897	30,046	51,706	10,017	63,301
1898	26,917	54,901	8,795	63,519
1899	24,692	52,901	7,547	59,471
1900	23,803	50,140	6,586	56,395
1901	20,250	42,046	5,025	48,814
1902	18,581	41,246	5,586	48,487

(NOTE: Each year lists statistics in the Parliamentary Papers of that year, and represent the statistics for the previous session; i.e. 1896 lists statistics for the 1985-96 session etc. NL=Not Listed, due to low enrollment. Statistics stop with the session prior to the introduction of the new Continuation Class Code in 1901. PP 1895 XXX - 1902 XXXIII).

School officials fully admitted that Continuation Classes were basically a continuation of elementary work. In 1901 George Smith, Convener of the Evening Schools Committee of the Dundee School Board, stated at the EIS Annual Congress that the Continuation Classes in his district were almost all elementary in nature and "took the place of day schools."[326] The SED was fully aware of this state of affairs. The introductory note to the 1898 Code of Regulations For Evening Continuation Schools stated that the schools exist in part as a means of "supplying defects in the elementary education of certain scholars."[327] But Craik and the SED never

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[326]"EIS Annual Congress." EN Jan. 12, 1901, p. 28.

[327]"Scotch Code of Regulations For Evening continuation Schools." PP 1898 XXVII, p. 117.

relinquished their desire to have them provide an opportunity for students to learn the scientific principles which underlie their work, as well as commercial principles. This was a dominant factor, in conjunction with several others, that led to significant changes for Continuation Classes in Scotland.

The end of shared educational authority in Scotland was the first step. In 1898 the Science and Art Grants came under the control of the SED as did the associated classes of the Science and Art Directory. The former separation of power had led to inefficiency and abuse of the system of grants. In conjunction with Continuation Classes it was written in 1899:

> Cases have occurred where a grant was claimed from both departments on account of the same subject taught, though under different names, by the same teachers to the same pupils at the same hours.[328]

The transfer of the Science and Art Department to SED authority would mean that grants to Continuation Schools for science subjects could be easily checked and dispersed more efficiently. In addition to giving the SED an opportunity to more directly promote science subjects in Continuation Classes, it also gave them oversight of the management of such classes. This was a vital point. It was often reported that evening classes had become nothing more than "adventures of teachers". This meant that teachers in state schools were often using this area of instruction to earn extra money, and not to foster healthy academic work.[329]

Finally, it was to be re-emphasised that the grants were "grants in aid" of local efforts. The locality had to assess the need, provide the equipment, and pay the teacher. If the SED determined that the classes had been conducted satisfactorily, the grant would be payable when the whole expenses of the class had been ascertained.[330] Though this put an extra burden upon local authorities it would remain Department policy for several years. The rational behind it was simple. It would force local authorities to provide only those classes that met a determined need, and could be carried out efficiently, rather than being 'adventures' of the teachers.

By the turn of the century the SED was keenly aware that a restructuring of Continuation Classes was necessary to give them a more clearly defined organisation and purpose.[331] Doing so would serve a dual purpose. First, it would provide a clearer structure to encourage students not only to attend, but also to undertake a more

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[328]"CCES Report, 1898-1899." PP 1899 XXVI. p. 30.
[329]Ibid., p. 31.
[330]Ibid.
[331]See generally, "CCES Report, 1899-1900" PP XXIV 1900. pp. 30-31.

effective course of study. Second, it would be a second mechanism to help eliminate of the classes that were not serving a useful function.

The first of these two objectives provoked a greater sense of urgency with the Department than the latter. As mentioned above the number of students attending Continuation Classes had been decreasing for several years in a row, and many classes had fewer students than five years previously. SED inspectors sounded the alarm and urged action.[332] Some in the SED tried to throw such reports into the best light possible. Reasoning that the Continuation Classes had for some time acted to repair deficiencies in elementary education, the falling numbers indicated that each child was receiving a "sufficient modicum of elementary education which it was unnecessary to increase."[333] However, it was pointed out that this could not be confirmed, and that the second purpose of providing commercial and technical education was not being met either. The situation was worse in rural areas than in the cities. Nevertheless, one inspector said that with regard to this type of education "the day school teacher might well drop out of evening work and have his evenings to himself."[334]

Part II: The New Continuation Class Code of 1901

1. Historical Development of the New Code

The SED and its educationalists saw the new Code as yet another step in a long process of reorganising the educational system of Scotland. And, thus it was viewed not as a break or new direction, but rather one reform in the context of a concerted effort to place Scottish education on a more efficient footing and direct it so as to address the concerns of the day.

Contemporaries conveniently dated this drive for reorganisation back to 1898 when the administration of the Science and Arts grants in Scotland were transferred to the SED. This move had allowed the SED to control and promote the very courses which were being increasingly valued as the 20th Century approached. The next step was the new Day School Code of 1899. It dealt with the organisation of those schools aided under the Code. The Code's most important features were attempts to utilise the money for specialised instruction in these schools (both under the Code and the Directory) for more generous support of advanced instruction past the stage of the MC. The next step came the following year with the publication of the SED Minute of 24th August. It dealt with the conditions of Science and Art teaching in schools which were not eligible for grants under the Code, but did receive grants under the Science

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[332]"General Report for the Year 1899, Southern Division" HMI Stewart, PP 1900 XXIV, p. 498.
[333]Ibid.
[334]Ibid.

and Art Directory, i.e. secondary schools. In addition, for Continuation Classes the SED abolished payment by results, as well as prescribed syllabi. Substituting for the prescribed syllabi were ones framed by the local managers, approved by the SED, and designed to meet the needs of the locality. In order to combat the tide of unqualified teachers the SED formed a register of qualified teachers.

All of these reforms carried a dual purpose. They were aimed to both simplify and consolidate the work of schools by making instruction in Science and Art subjects an integral part of the general education received by students. In contrast they sought to discourage the practice of teaching a multitude of subjects to a distinct, special set of students. The new Continuation Class Code in the next year reached into the next stage of the educational system, but still embodied these general aims of the reforms that had preceded it. Therefore, though examined here in relative isolation, the Code was part of an overall effort to restructure and re-focus education in Scotland.

2. Goals and Provisions of the New Code

It was with the twin goals of correcting certain defects and stimulating attendance, as well as setting Continuation Courses on a more efficient footing that the new "Code of Regulations for Continuation Classes" became effective in July of 1901. It was this Code that would guide the development and direction of Scottish Continuation Classes for years to come. Replacing the former Evening Continuation School Code and covering the operations which fell within the scope of the Science and Art Directory as it related to evening classes, the new Code made substantial changes. It simplified and consolidated classes, and presupposed that those attending has completed their general elementary education.[335] The heterogeneous collection of classes was replaced by an organised system, framed on broad and simple lines. It was aimed directly at the perceived defects of the old system. A litany of these defects was described in 1905:[336]

> For the lad who came to study the principles of his trade or occupation the system had some peculiar drawbacks The subjects of the Syllabus could not always be built into a course which really met his particular needs; advanced work was at a discount; the classes were frequented by pupil teachers and acting teachers in quest of examination marks...and the instructors were too often persons who had little or no practical knowledge of their subjects, but had passed examinations in them

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[335]See generally, "Circular 320 Continuation Class Code August 1901." EN Aug. 17, 1901, pp. 576-578.

[336]"Selection of Circulars. Part IV Continuation Classes." PP 1905 XXIX, p. 258.

> merely in order to acquire the right to teach them to others.

That which broke most from the past was the decision by the SED to remove Continuation Classes from the sole province of the evenings. Under the new Code classes could be held at any time of day. Over the years inspectors and teachers had reported with regularity that students who attended the evening Continuation Classes were often tired from the labours of the day to such an extent that it was prohibitive to effective academic work. The SED thought they could counteract this by allowing classes to take place during the day. It also hoped that it would raise the status of the classes. Doing so might convince employers of their value; which in time might lead to a German style scheme which mixed employer training and academic studies in the principles of the work.

There remained no restriction on age, but for grant purposes pupils had to be free from the obligation to attend school under the Education Acts. As previously discussed the Education (Scotland) Act of the same year raised the practical leaving age to 14 years. If a pupil was exempted from regular attendance at the age of 12 years the relevant School Board had the power to make it conditional upon further attendance at school until the age of 14 in Continuation Classes.[337] Lastly with regards to age of the students, there was concern over students not attending Continuation Classes directly from school. In many cases many years had passed between regular school attendance and beginning work in Continuation Classes. A condition that, along with the many who did not attend at all, came to be known as "leakage." Chief Inspector Stewart summed up the Government's position:[338]

> If these pupils could be persuaded to join a Continuation School *at once* when they leave the day school, the evaporation of knowledge which is so rapid and so disheartening would not occur to such an extent, and they would be prepared to go on with useful practical advanced work as soon as possible.

The most fundamental change was the grouping of courses into divisions. Division I was comprised of elementary courses; primarily those associated with the traditional role of the classes in supplementing or correcting deficient elementary training. Included in this division were English (reading, writing, and composition), principles of Arithmetic, Drawing, and any one class chosen from History, Geography, Nature Knowledge. The key to this division can be found in Article 5. Students were not allowed to sign up for single classes, but rather had to take the

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[337]The Education (Scotland) Act, 1901. Section 3. 1 Edward VII., Chapter 9. Reprinted in Graham, Manual.

[338]"General Report for the Year 1900, Southern Division" HMI Stewart, PP 1901 XXII, p. 500.

whole course of subjects. This was in line with SED policy that Continuation Classes should move away from the "hit and miss" method of students attending one or two unrelated classes. Instead, with this Code it clearly laid out that it was essential that subjects should have some type of homogeneous character and embrace a definite aim relative to the student's life objectives.[339]

Although it will be seen that these courses turned out to be the bed-rock of Continuation Classes the division was included somewhat reluctantly. Craik envisioned the Continuation Class system as one dispensing specialised instruction in practical topics. They did, however, recognise that the majority of students did not yet possess the requisite general knowledge to profit from specialised instruction. Thus, Division I was included, although at the time it was regarded as serving a temporary purpose only. The realisation of the main objectives of the Code rested upon the classes conducted under Division II; and especially Division III.

Specialized instruction in elementary subjects composed the work of Division II classes; especially classes that may be of use to those engaged in or preparing for a particular occupation. As was historically the case the local managers were given some freedom to provide courses suitable to the community. Indeed, the only mandate was that subjects in this division be "admitting of systematic exposition" and be approved by the SED. Recommended classification of courses included English subjects such as the Life and Duties of the Citizen and History; the study of any approved language; commercial courses such as Book-keeping, Shorthand, and Commercial Arithmetic; art subjects such as Elementary Design; Science subjects such as Natural Science; applied Mathematics and Science; and Handwork subjects.[340]

Although the taking of single subjects was allowed in this division, students were again to be encouraged to take a series of subjects related to each other and extending over successive years. Ideally a student would endeavour to take subjects encompassed in one specialized classification. As a practical way of achieving this goal an enhanced grant was allowed under Article 49 for prolonged attendance, while "no account is taken of a few attendances by pupils whose effort is not sustained to a point at which the instruction given begins to be really effective."[341] Again SED policy to not only encourage sustained attendance, but also systematic study was implemented through manipulation of the grants as well as the regulations of the Code.

In order for the SED to further insure that those enroling in Division II classes were able to benefit from the more advanced training several entry qualifications were

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[339]"Code of Regulations for Continuation Classes, 1901." PP 1901 LVII, pp. 6-7. See also, "Memorandum" preceding the Code.
[340]Ibid., pp. 7-8.
[341]Memorandum preceding the 1901 Code.

imposed. These included having obtained a MC or having attended at least thirty meetings of a Division I class in a previous session. So as not to discourage the traditional clientele of older students completely, those over 14 years of age in the 1901-02 session, over 15 years in the 1902-03, and over 16 years thereafter were exempted from these qualifications.

The crowning glory of the new Continuation Class system was to be the classes in Division III.[342] It was in this division that advanced specialised classes were taught. As such it was the embodiment of Craik's vision of the Continuation Class system as provider of practical education for the working masses of Scotland. This division was composed solely of organised courses of instruction extending over several years. Included were provisions for commercial courses as well as industrial courses. However, the commercial courses were simply those provided for in Division II taught at a higher level. Similarly, the industrial courses were made up of the Division II courses in Applied Mathematics and Science; presumably taught to a higher level of attainment. Much like the provision for grants with regards to Division II, an increase in grant was awarded the longer the student stayed on. The increase, however, was premised on SED approval of laboratories and workshops.

The above described divisions of class work in the Continuation Schools could be viewed as mainly cosmetic. There was no guarantee that creating an advanced division on paper would translate into schools adopting such curricula, and certainly did not assure that students would strive towards them. The new organisation did, however, provide an efficient method of grouping classes, evaluating the accomplishments of schools, and tracking the level of classes students attended. The grant system also provided some incentive for schools to encourage students to stay on for more than one session and aim at the higher level of work. Indeed, it was this graduated system of grants that encouraged the formation of courses extending over several years and provided systematic training in the principles of an occupation. The substitution of 'course based' curriculum for the former 'subject' oriented one was the keynote of the new Code. It underlined that the object of the classes was "not to teach science in general or art in general, but to turn out mechanics, engineers, architects, farmers, each skilled in the principles of his own craft."[343]

Other key provisions of the Code attempted to assure that it would actively promote and improve Continuation Classes, rather than simply repackaging them. Again, this was often done through manipulation of the awarding of grants so that it

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[342]There was a Division IV comprised of auxiliary classes such as Military Drill and Physical Exercise.

[343]"Selection of Circulars." p. 259.

acted to reward the type of programs and reforms that Craik and the SED supported. For example, with the exception of rural areas and Division I classes, classes had to be distinct, and simultaneous instruction by the same teacher of two classes or courses was not permitted.[344] This aimed to stop some the grant abuse described above in which teachers taught the same course under different names. It also hoped to secure a clear distinction between classes in Division II and the identical class in Division III that was to be taught at a higher standard. Classes also had to be open at all times to inspectors. In turn, inspectors were empowered to recommend a deduction in the grant for faults in equipment, instruction, etc.[345]

Oddly one of the sustained complaints with regards to Continuation Classes was not truly addressed: the qualification of teachers. The Code, for all the avenues of improvement that it opened, failed to adequately address this topic. It did not set down any clearly defined standards, but rather simply states that some ambiguous "knowledge" of the subject was required.[346]

The final aspect of the Code bore witness to a more general trend taking place during these years in Scotland: the awarding of certificates. The new certificates created by the Code replaced the written examinations. The SED and school officials both believed that awarding certificates for satisfactory completion of prescribed courses of instruction served two useful purposes. First, whether it be the MC, the LC, or the new certificates for continuation work, they gave the pupils a definitive goal. This provided encouragement to attend regularly, and stay on to achieve the set goal. Second, they provided employers with tangible evidence of successful completion of the specified academic program.

Article 70 of the new Code provided for the awarding of these certificates. They could be awarded simply for the completion of a single class, and for Division III classes these would be known as Honours Certificates. However, the criteria remained liberal, and the school had the freedom to determine the conditions although the SED had to approve them.[347] A Departmental Circular in the Spring of the following year provided a clearer view of what these certificates were intended to accomplish. It was recognised that they would not have the authority of the LC and were not considered on par with them. Indeed, the MC also was seen to be on a higher level not only for the greater structure involved in it being awarded, but also

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[344]"1901 Code" Article 44, p. 12.
[345]Ibid., Article 47, p. 12.
[346]Ibid., Article 63, p. 14.
[347]Ibid., Articles 70 & 72, p. 15 & 16.

because employers were more cognizant of it. Craik did, however, want the certificates to act as a useful indicator of the work completed and the level attained.[348]

The SED laid out a multitude of clauses actings as "guarantees" that the certificate should be at least as "trustworthy as those issued on the results of a single written examination."[349] The key aspect of the certificates was the desire that the certificates be relevant to businessmen and other employers. Possibly Craik had learned a lesson from controversies over commercial education, and the relevance of the MC to businessmen. In that case Jacks had complained that the MC did not tell a prospective employer anything about the type of education the candidate had received. Although Craik rebuffed such comments at the time, possibly he had taken them to heart afterall. Of the new Continuation Class certificates he mandated:[350]

> The Certificate should first and foremost show clearly the range of instruction to which the Certificate is relative. Accordingly, while the name of the subject only. e.g. Commercial Arithmetic, need appear on the face of the Certificate, there should be printed on the back of it a syllabus or description of the actual subjects of study which are to be understood as embraced under the general title appearing on the face of the Certificate...Having thus defined the exact scope of the instruction to which the Certificate is relative, what is needed in addition is that the Certificate should show clearly the comparative proficiency of the student in that range of study.

Most of the provisions of the new Code were optional; meaning that a School Board was not bound by law to, for example, establish Division III classes. Indeed, a School Board was not even obliged to conduct Continuation Classes at all. Supplementary Classes were adequate to take a pupil to the mandatory age of 14 years, and in many areas even with a grant Continuation Classes were not considered sustainable by local authorities. Thus, in the aftermath of the Code there were three questions which would be addressed. First, what was the effect of the Code on Continuation Classes that were already established? Second, would School Boards take full advantage of the possibilities provided by the Code? Finally, would some School Boards, accustomed to greater liberty in their operation of Continuation Classes simply cease to conduct them after finding the operations of the Code too vigorous or confining?

3. <u>The Effects of the Code of 1901.</u>

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[348]"Continuation Class Code (Article 70)" Circ. 350, Mar. 8, 1902. PP 1902 XXXIII, pp. 273-277.
[349]Ibid., p. 275.
[350]Ibid., p. 276.

In the year immediately after the Code came into effect there was a great deal of speculation as to what effect the Code would have. The H.M.I. Stewart postulated that the Division I classes would soon become obsolete as elementary training became more effective and permanent, and that great developments would occur in Division II and especially Division III classes. Another H.M.I. Macnair said that in the first year few schools had taken advantage of the provisions of the new Code, but that would certainly change as the years went by. H.M.I. Barrie predicted that the Code could have a short term negative effect. He noted that in recent years there had been a trend toward shortening the length of session in Continuation Classes. This was done in part to save money, as well as to make them more attractive to students. A short session was especially common in rural areas were the demands of the seasons kept the time available for attendance at a premium. As the Code hoped to stop this process he predicted that "the regulations of the new Continuation Class Code will curtail the number of these schools very considerably."[351]

By the following year inspectors were reporting that the Code was providing a "powerful stimulus" for the system of Continuation Classes to provide specialised instruction in groups of subjects. Although the process was slow and laborious the reports were positive: "there is every prospect that genuine and extended progress will be thus secured in various well-defined lines of study."[352] Thus, in many ways the most important service that the Code provided was as a blueprint for future development and progress.

It was the ability to group similar subjects that was represented as providing the greatest strength to the classes. The Chief Inspector of Schools in the Southern Division of the country noted that the greatest weakness of the previous system was that it lacked this fundamental advantage. He wrote:[353]

> Under the old system there was little room for grouping of kindred subjects, and the schools were not classified for the teaching of special subjects. Pupils usually found their way to the nearest school, and consequently their occupations were discovered to be rather varied. An extended *general* education was aimed at.

The grouping of subjects was seen as essential in Divisions II & III as it would tend towards a concentration of effort, and a hope that it would raise the quality of work. In this regard it appeared that in the years immediately after the institution of the new Code that commercial courses were taking the lead.

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[351]"Report for 1901, Southern Division" HMI Stewart, PP 1902 XXXIII, p. 710.
[352]"Report for 1902, Southern Division" HMI Stewart, PP 1903 XXII, p. 696.
[353]Ibid.

This highlights the other hope for the new Code: that it would lead Continuation Classes away from the general, often elementary, education that the classes had previously provided. Specialisation and advanced work was the focus. Some inspectors were clearly ahead of their times. They often would advocate the establishment of separate centres of Continuation Classes each with its own specialty. In the end a system of centres was advocated for scientific and technical subjects, some for commercial and others for industrial courses.

A central question, therefore, is whether the Code achieved these goals for the Continuation Classes of Scotland. There is no evidence that the idea of having various centres each with its own area of specialisation ever came to universal fruition. It also appears that providing for continuous study was difficult. H.M.I. Macnair reported shortly after the Code took effect that in Division II classes "the want of provision for *continuous* study is a pretty general defect."[354] The following year Stewart outlined three remaining and persistent problems in the Continuation Class system. First, there was a "dissipation in energy" in teaching a large variety of subjects to only a handful of students. Second, there existed a difficulty in retaining specially qualified teachers for technical and other advanced work, and most significantly, there was a lack of any "reasoned or reasonable" course of study. Yet the mood and attitude remained upbeat and optimistic. Despite these problems the Chief Inspector declared in a somewhat philosophical and mystic manner: "System and method have been introduced, and the chaos that prevailed is slowly crystalising into an orderly cosmos."[355]

What of the desire to foster advanced specialised work and ultimately eliminate the elementary work of Division I courses? It was affirmed that it was in Division II and III classes that the main objectives of the Code, specialised instruction of both a elementary and advanced nature, would be realised. Yet in 1903 there remained a large number of students who should have theoretically been ready for advanced work, but lacking in basic elements of a general education were only able to take advantage of the elementary courses. It was also recognised that it was not always practical to provide a 'comprehensive and progressive course of study' extending over several years save in the large cities.

The statistics from that year seem to bear out this thesis. For example, out of 267 continuation class centres in the Southern Division there were only 20 offering the advanced specialised instruction in Division III classes. Several counties including Berwick, Haddington, Kinross, and Peebles had no provision for Division III classes.

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[354]Ibid., p. 698.

[355]"Report On Continuation Classes, Southern Division, 1903" HMI Stewart, PP 1904 XXI, p. 585.

This stands in stark contrast to the 152 centres providing elementary classes under Division I. Statistics show that Division II classes were much healthier with 227 centres providing classes. Officials were keen to look at the bright side of these numbers: all schools were not providing Division I courses, rather only about half. Also, some steps had been taken towards a system of school specialisation. An attempt was made to restrict the number of courses at any one school so that students selecting a commercial or an industrial course were required to attend different schools according to the course they desired.[356]

This general trend with regards to Division III courses was repeated across Scotland. Although there was a slow and steady increase in schools offering Division III classes, they remained a small fraction of the total. For example, in the session after the new Code was passed of 736 continuation class centres nationwide, only 56 had Division III classes; representing a mere 7.6% of the total.[357] Three academic sessions later the overall number of centres had increased slightly to 748.[358] Those offering Division III classes also had grown in number to 96, but remained a small proportion of the total (only 13%).[359] This state of affairs continued right up until the time of the new Education Act in 1908. During the 1907-08 session the number of Division III centres had grown to 113, or 14% of the total.[360] While this was disappointing in the respect that the advanced specialized instruction the courses afforded was not widely engaged, the steady progress must be noted as a generally positive trend in any evaluation of the Continuation Class system.

The statistics also support the conclusion that Continuation Classes were not widely spread across regions. The three large towns in the Southern Division, Perth, Stirling and Edinburgh accounted for 48% of all the centres, and over 50% of the centres were found in Edinburgh and Fife alone. This phenomenon was not surprising, however. Continuation Classes had traditionally prospered in urban areas and languished in rural ones. However, the instability of the system, particularly in the latter areas undermined the entire system.

The 1904-05 session witnessed an increase in the overall number of Continuation Class centres for the country from 734 in the previous session to 758. However, underlying this apparent healthy growth was an unstable vacillation in the system. There had actually been 135 new centres between the two sessions. That

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[356]Ibid., p. 589.
[357]"CCES Report" PP 1906 XXX, p. 31.
[358]This actually represented a decrease of 13 from the previous session, but still marked an overall rise from the time of the new Code.
[359]"CCES Report." PP 1906 XXX, p. 31
[360]"CCES Report." PP 1908 XXVIII, p. 31.

meant that an additional 111 centres had ceased to operate entirely. In addition, at another 45 centres proposals to institute classes fell through before any class actually met, or after a short trial period. This instability continued over the years. During the 1906-07 session 157 centres representing 77 separate managing authorities dropped out. Further evidence of the frail existence of many Continuation Classes could be found in the number of centres which had plans to institute classes, but failed to do so. During the same session 42 centres had proposals to institute classes fail before a class could be taught.[361]

The responsibility for these fluctuations were normally placed upon the rural areas where there was less incentive to attend, and the remoteness of the district and severities of the weather often hampered efforts. In addition, there was a difficulty in finding properly qualified teachers in the country districts. The majority of the classes were conducted by the day school staff, and they did not venture to teach subjects other than those they were already acquainted with; normally elementary topics. The general diminution in rural areas was also attributed to the long sessions demanded by the Code. Earlier warnings had foretold this, and it appeared to be coming to pass. Farm servants and other rural labourers would readily attend during the long winter evenings, but with the lengthening day their working hours would correspondingly increase and they stopped attending.[362]

However, another disturbing condition seemed to prevail. In 1904 a report stated that it appeared that the loss of centres nationwide was in large part attributable to the fact that the young people of many localities "do not realize the value of the opportunities offered for educational advancement."[363] In 1907 it was noted that much of the problem stemmed from "the lethargy shown by managers and pupils concerning education beyond the stage of the day school."[364]

The combination of these problems led many to consider the desirability of making Continuation Classes compulsory for a number of years, possibly to the age of 16 or 17. Testimony given to the 1903 Commission on Physical Training provides insight into the thinking at this time on the subject. Many testifying before the Commission did indeed favour compulsory attendance. For example the Earl of Meath[365] favoured it because of the international comparison. He stated: "I believe it is compulsory in Germany, and I do not see why it should not be in this country."[366]

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[361]Ibid.

[362]"Report on Continuation Classes, Southern Division, 1904" HMI Scougal, PP 1905 XXIX, p. 809.

[363]"CCES Report" PP 1905 XXIX, p. 32.

[364]"CCES Report for 1907-08" PP 1908 XXVIII, p. 31.

[365]Reginald Brabazon, the 12th Earl of Meath, had spent several years in Germany and with the Foreign Office, including an appointment to the embassy in Berlin. In later life he was closely

However, almost all of those that favoured compulsion did so not because of the educational benefit that would accrue. Rather, individuals viewed compulsory attendance at Continuation Classes as means to control social ills. For example the Earl considered compulsion as the only way to get the "rougher" boys to attend. Rev. Williamson's principal concern was that when the young left the control of the school they came under harmful and evil influences of the Dundee jute mills and other factories. With regards to the mill girls he maintained not that they needed further education in the academic sense, but rather refinement and "a well-directed discipline under a refined and educated woman to give them the self-respect so little thought of in their daily work."[367] In general, Williamson felt that the schooling acquired had not prepared girls and boys alike for the "temptations" they were subjected to in the real world, and favoured a course of "discipline and training" in the continuation schools to prepare them to these evils.[368]

The business community once again proved to be an obstacle to the issue of Continuation Class, as well as compulsion. Richard Wilson, headmaster of Kent Rd. School in Glasgow, said that he was not aware of any businesses in Glasgow voluntarily making attendance at Continuation Classes compulsory for their charges.[369] One of the common arguments for this, and the general disfavour found among businessmen for the issue of compulsion, was that it would place too much of a strain on those that had worked a long day. While elsewhere in this work there is ample evidence that students worn out from a long day of work limited the educational benefits of Continuation Classes, several individuals testifying before the Commission indicated that this situation did not preclude compulsion in all cases. Rev. Williamson indicated that there was nothing done in the day of a mill girl that would make it impossible for her to attend Continuation Classes. Wilson held much the same opinion with regards to the male population of Glasgow. Although he confessed that his opinion was based upon his observations of them "loitering about at street corners" during after work hours.[370]

Dyer had a more direct answer for why businessmen and industrialists did not favour universal compulsion. He stated that it was simply because "they wish to

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associated with issue of physical training, including being a member of the National Association for Promoting the Teaching of Physical Exercise in School. Without success he twice brought bills before Parliament to make physical exercise compulsory in elementary schools, before it was adopted in England in 1904.

[366]"Royal Commission" Testimony, p. 341.

[367]Ibid., p. 300 & 341.

[368]Ibid., p. 306.

[369]Ibid., p. 202. Wilson had previously served as headmaster of several other schools in Glasgow, including Dobbie's Loan Public School and St. George's Rd. School.

[370]Ibid., p. 303 & 201.

employ cheap labour as much as they can." Instead of following the course of compulsion Dyer believed that it would be more effective to make "it illegal to employ the boys beyond a certain number of hours per day."[371] This avenue would allow more time for education, thus doing away with the issue of exhausted students and leading to an employment situation in which compulsion could be realistically considered. It would be several years until this issue was addressed in a legislative manner in the Education (Scotland) Act of 1908. However, beyond the role of employers there was another practical impediment to compulsion: lack of accommodation and classes. For example, HMI Lobban of Ayrshire recognised that compulsion might be good for "individual and country", but conceded that it was impractical in his area because of the very limited number of Continuation Classes.[372]

The one employer called before the Commission, the jute manufacturer William Henderson, indicated that he did sometimes offer to pay the fees of his employees, especially if they were apprenticed to be mechanics. However, few of his charges had taken advantage of the offer; reflecting the disinterest described in the reports of school inspectors. Despite this fact he did not favour universal compulsion. Instead, he and many others favoured compulsion with wide exceptions for those continuing their education or engaged in work.[373] This option was designed to bring in all of the "loafers" talked about at length in Chapter 4.

The Rev. A. L. Lilley was one that favoured this approach, and the benefits it would have on the "loafer" and "hooligan" class in Scotland. Drawing from his experience he proposed compulsory attendance only for those of the hooligan class, and then attendance not of classes of an academic nature but rather of a physical one. Lilley believed that physical training was the method to calm and discipline the beast. He stated: "The only hope we have about a boy, the roughest class of boy, is to train him physically and to get him under a certain discipline which would be connected with physical training."[374] In addition to the other exceptions, Lilley advocated exemptions for a higher class of boy, as well as boys who were engaged in "some further kind of preparation for his life-work and yet is the son of a working man."[375]

The always more cerebral Dyer again disagreed with this approach embraced by the majority. He believed that a regime of physical training would have little effect on loafers. Dyer recognised that to effectively address the issue of loafers and

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[371]Ibid., p. 312.
[372]Ibid., p. 46.
[373]Ibid., p. 574.
[374]Ibid., p. 345.
[375]Ibid. The issue of physical training generally, and in connection with Continuation Classes is discussed more fully in Chapter 8.

hooligans required more than physical discipline, and indeed more than a mandate to attend Continuation Classes. He concluded: "I'm afraid that the loafer requires very special legislation from many points of view, and physical training by itself would do little to reform him. You must cultivate his brains as well as his body."[376]

Yet, the conclusion was obvious. Overwhelmingly those that came before the Commission viewed Continuation Classes, and compulsory attendance at them, as a vehicle for addressing society's ills; be it rough and unrefined mill girls, young people overly susceptible to the temptations of the world, or the loafers and hooligans that were perceived to fill the city streets as menaces to society. In other words Continuation Classes would become the sole province of the "hooligan" and "neglected" class of Scottish youth. There they would be disciplined through physical training, with limited attention to academic work. It is not hard to imagine that few hard working and academically inclined boys would choose to further their education at Continuation Classes filled with hooligans who had been forced to attend, and this was not the scenario the SED had in mind.

Outside of the issue of compulsion it is also necessary to determine the worth of the education that was given to those that did voluntarily attend Continuation Classes. The success or failure of the grouping of subjects, as discussed above, gives some indication of the relative effectiveness of the new Code in improving the education offered. In addition, the number of centres offering advanced, as opposed to elementary, instruction is also evidence of this. However, one must also examine the nature of the instruction given. For example inspectors often complained that there was enormous variations in the quality of instruction despite the Code's attempt to create some type of national system.[377]

In assessing the value of Division III classes, therefore, one must consider the quality of education received even in the relatively small number of centres. While many reports stated optimistically that standards were rising, others noted a more worrying scenario. In 1904 inspectors in the Southern Division uniformly reported that while the classes had done useful work the standard reached in the majority of classes was not very high.[378] However, as discussed above, the steady increase in these classes was an encouraging sign for the SED. During the the 1905-06 session the progress was attributed to a greater attention in adapting schemes to local needs and an improved correlation with the work of the students.[379]

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[376]Ibid., p. 312.
[377]"Report on Continuation Classes, Southern Division, 1905" HMI Scougal, PP 1906 XXX, p. 676. From a report by Inspector Macnair.
[378]"General Report for the Year 1904." Scougal. p. 803-04.
[379]"CCES Report" PP 1906 XXX, p. 32.

Some solace can also be found in the fact that in the years after the new Code Division II classes providing 'specialised instruction in elementary topics' uniformly outpaced the number of Division I courses and grew steadily. For example, during the 1901-02 session the number of centres offering such classes was 622 nationwide, compared to 483 offering Division I classes. By the 1907-08 session the number had grown to 636; nearly double the number of Division I centres. Again, in order to adequately assess the effectiveness of these classes, and in turn the effect of the new Code in actually improving the system, one must consider the classes themselves. Despite the expressed goal and purpose of providing something higher than the elementary education found in the day schools this does not seem to have been the case. Indeed, it would appear that in many cases there was little difference other than title and category between many Division II classes and their counterparts in Division I. Inspectors reported that a very large proportion of the classes' work was "mere repetition and amplification of what has been previously done in the elementary school and subsequently forgotten."[380]

Finally, among the small number of classes in Division III and the often faltering quality of Division II classes, Division I classes must be examined. The degree to which Division I classes subsided, if at all, was an important yardstick of success. Afterall, it was a central goal of the Code and the SED that such classes would diminish as previous elementary education became more thorough, thus allowing students in Continuation Classes to fully benefit from advanced specialised instruction. Some cities such as Edinburgh did witness a shrinkage in the number of Division I classes, but despite the conviction of the SED that these classes would soon become obsolete they remained numerous. In country districts they made up the majority of all classes taught, and in 1905 H.M.I. Scougal called hopes that Division I classes would no longer be needed "utopian."[381]

To what factors can the persistent existence of these elementary classes be attributed? It can be argued that in a general way it reflected the still rather limited nature of elementary education in Scotland, despite the fact that it had been mandatory since 1872. In the country districts it was put down to the fact that many of the pupils attended Continuation Classes only after a long absence from school, and thus required revision in elementary classes.[382] However, the Chief Inspector noted that even in the towns and cities Division I classes also comprised a distressingly large proportion of the system. He identified three broad explanations. First was the failure

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[380]"Report for 1904" Scougal. p. 803.
[381]"Report for 1905" Scougal. p. 672.
[382]"Report for 1904" Scougal, p. 809. From a report by Inspectors Barrie and Craigie.

of day schools to secure the ends of their Code. In this regard he believed that managers and teachers in the elementary schools did not take full advantage of the Day School Code. Second, he equally felt that the day schools did not take full advantage of the various means of financial support on offer. Finally, and most telling, he noted a lack of local initiative and enterprise, particularly from businesses.[383]

The enduring need for Division I classes and the drain it imposed on the true goals of the Continuation Class system to supply advanced technical, commercial, and scientific instruction to the working classes remained troublesome to the SED and other educational officials. It was clear something had to be done with this Division. It obviously was not going away.

4. Conclusions

The provisions of the new Continuation Class Code were intended to effect more than the structure of the curriculum of classes. By making provision for specialised instruction it was intended that they become the vehicle for this type of education. In turn, other schools in the system were to reorient their curriculums away from this type of instruction. An SED Circular from 1901 stated: "it will be [sic] matter for consideration whether further step may not be taken to relieve the curriculum of the schools proper, whether elementary or secondary, from elements and subjects which are foreign to their proper purpose."[384] Thus, the Continuation Class Code was intended to make its classes the bastion of specialised education, and direct other schools away from it towards a thoroughly more general curriculum.

The Code put an addition burden on those schools beneath the Continuation Classes. It was recognised that the success of the specialised classes, and therefore the Code itself, rested upon the thoroughness of the general education of pupils prior to entering Continuation Classes. The majority of students in Continuation Classes were still lacking the education to be able to take advantage of specialised classes, and therefore were only able to engage in additional elementary topics. If the Division I courses were truly to be a temporary measure as the SED hoped then the level of education that came before had to be improved. The onus was put on school managers, especially those who were managing Continuation Classes and a school proper. For them it was to be "first duty" to secure prolonged attendance at school.[385]

During the years from the institution of the Continuation Code 1901 and a new Code in 1906 several broad changes in continuation education can be outlined. First,

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[383]"Report for 1905" Scougal, pp. 671-672.
[384]"Continuation Class Code" Circ. 320, PP 1901 XXII, p. 263.
[385]Ibid.

continuation education in theory was no longer the sole province of evenings. Despite this, the majority of students utilizing Continuation Classes continued to do so at night. Encouragement was given to children to remain longer in day schools by the 1901 Act and improvements were made in the course of instruction of the closing years. Most important, however, was the regrouping of the Continuation classes as part of a systematic effort to make the instruction more relevant to the industrial and commercial callings of the pupils. The characteristic feature of this organisation was the adoption of the 'course system." It encouraged and in some cases required students to attend carefully arranged groups of classes instead of taking classes from different branches indiscriminately and without a coherent plan. Both Division II and III presupposed the instruction of pupils in a subject, or ideally a well-defined and homogeneous group of subjects, of practical value to them with regards to their occupation or intended employment. This changes were accompanied by a rebound in enrolment figures. However, this improvement generally was confined to the cities and major towns. In the country districts classes floundered and centres often failed.

Part III: The Continuation Class Code of 1906: Re-working Division I

Five years after the previous Code the SED instituted a new Continuation Class Code in 1906. It was not a complete re-working of the system. Rather, frustration over the inability to eliminate Division I classes, and the often haphazard, disorganised manner in which they were taught led the SED to concentrate on this aspect of the system. Undoubtedly confronting the reality that the elementary instruction was going to be required for many years to come, the division was reorganised to place it on a sounder foundation and provide more structure to the course work.[386]

Replacing the previous list of subjects for students to choose from, Division I was given a definitive scheme of instruction. Under the Continuation Class Code of 1906 managers of schools were required to submit for approval a course of instruction for Division I. It had to include two courses: (a) the study of English as listed in the Fifth Schedule of the Day School Code, Head A, and (b) instruction based on one of the courses listed in the Sixth Schedule. In addition, it could, but was not required to, include any of the subjects listed in the Fifth Schedule, Head B.[387] Significantly the Code mandated that the subjects of the approved courses must be taken by all pupils, and attendances for single subjects could not be registered for grant purposes without special approval by the inspector. In addition, in response to the prolonged instability

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[386]"CCES Report." PP 1907 XXIII, pp. 30-31.

[387]See generally, "Code of Regulations For Continuation Classes, 1906." Article 3. PP 1906 XCII, p. 7.

in the rural areas special provision was made for any length of session that was deemed suitable and approved by the Department.[388]

The Fifth Schedule, Head A of the Day School Code simply provided for a course of instruction in English; the main object of which was to "create a taste for good literature."[389] In addition, it laid down an outline for efficient course work. The Sixth Schedule established regulations for the Supplementary Courses of the day school. It provided four courses: Commercial, Industrial, Rural, and Household Management for girls (as discussed in Chapter 2).[390] The Fifth Schedule, Head B was general classes bearing upon the general life of the student, such as "The Empire" and "Money Matters."[391]

By openly embracing a curriculum designed for the day elementary schools the SED was facing up to the reality that this was the type of instruction with which the division was primarily occupied. It also recognised the fact that the vast majority of teachers in continuation schools were simply day school teachers most comfortable teaching subjects with which they were already familiar. By structuring the division along these lines a more systematic approach to the instruction was intended. However, the SED also doomed the Division I classes to simply providing further elementary education already found in the day schools. In effect it made the Division I continuation courses little more than an appendage of the elementary schools, carrying out precisely the same function and work.

The inclusion of the more specialised industrial and commercial work of Schedule 6 was something of a *non sequitur*. There was nothing to suggest that students proceeding from the day school were ready to take advantage of this work, and a pupil could choose to take solely the English course. Also, if a student was of the ability to do so the more logical step would be to have him enter upon the work of Division II or III. Further reducing the significance was the fact that they were already available in the Supplementary Courses. Thus in many ways this was needless repetition.

Part IV: Success and Disappointment: The Years From the New Code to the Education (Scotland) Act 1908.

The years between the enactment of the new Code and the passing of the Education (Scotland) Act in 1908 brought both success and failure for the SED and the Continuation Class system in Scotland. There was ample evidence that the classes

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388"Continuation Class Code, 1906." Articles 5 & 6, p. 7.
389"Code (1906) of the Scotch Education Department for Day Schools." PP 1906 XCI, p. 51.
390Ibid., p. 52.
391Ibid., p. 51.

enjoyed a level of popularity, and grew steadily though slowly in attendance. If young employees were to attend classes employers preferred it be in evening Continuation Classes, rather than staying on for additional years full-time at a day school. However, there was not yet a clear consensus among employers to require, or even to encourage boys to attend Continuation Classes once an apprenticeship or regular employment had begun. Indeed, the greatest struggle during these years for the SED would be early leavers and the businessmen of the country.

It appeared that the employers had in general complied with the regulations of the Act of 1901 against hiring children under 14 years of age. Rather, the main complaint of the SED towards the business community of Scotland was the continuing practice of hiring boys at 14 who possessed no certificate of any kind. This general reluctance to demand academic qualifications from potential employees vexed the SED and dealt a terrible blow to attempts to persuade students to stay on at school to complete a full course of study. In some cases it was not possible to convince students to complete a full elementary course as signified by the attainment of a Merit Certificate, not to mention any type of advanced study.[392]

The roots of the problem can be traced back to the elementary school itself and the continued frustration over Division I courses. H.M.I. Fraser confirmed that many of the pupils in Division I would, under favourable circumstances, been fit and able to earn a MC. A smaller group had been able to achieve little at the day school and are simply biding their time until they reach the age of 14. Yet in the end the blame is more squarely placed upon Scottish employers for not demanding qualifications. He wrote in 1906:[393]

> if a boy or girl is offered a situation at the age of fourteen, he or she is not likely to run the risk of losing it in order to get a Merit Certificate; and cases are not uncommon where children otherwise qualified have lost the certificate owing to the condition referred to.

This was especially true for students who had been exempted from attendance at day school, on the condition that they attend Continuation Classes until the age of 14. School Boards often had to compel attendance, and found it difficult to track down exempted students to do so. In keeping with the growing trend, they almost universally left at the earliest moment. A report by Fraser in 1907 stated that of 19 exempted students under one School Board, 15 ceased to attend upon reaching the age

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[392]"Report on Continuation Classes, Southern Division, 1906" HMI Scougal, PP 1907 XXIII, p. 730.
[393]Ibid.

limit whether or not they had earned a certificate. The only hope was that School Boards generally would issue exemptions more sparingly.[394]

The problem of Leakage also remained to be overcome during these years. There were some reports of teachers making a concerted effort to have students continue directly to Continuation Classes, and some success was reported. Unfortunately, this was rare. A report examining Edinburgh (often regarded as being at the forefront of continuation education) in 1907 illustrated the situation. H.M.I. Fraser documented that of 2,435 first time students 51% (1,247) had allowed more than a year to elapse before enroling in Continuation Classes. In addition, of the 3,200 students who left day school after the 1905-06 session only about a third (1,188) went straight on to Continuation Classes. His conclusion was that "the statistics are not much to counsel despair."[395] This practice had devastating effects for a Continuation Class system attempting to inspire higher specialised instruction. H.M.I. Gall remarked that those who waited to attend had forgotten all they had learned in the day school upon coming to Continuation Classes. Revision of past material was the only option, with the result that "their presence renders the name 'Continuation' Class a misnomer."[396]

There were, however, quite encouraging signs from each of the three divisions of Continuation Classes in terms of numbers and the education carried out. The reorganization of Division I classes under the Code of 1906 had an immediate beneficial result. It was reported that preparatory classes were steadily being given schemes of instruction more closely related to the Supplementary Classes. Nationwide the changes were seen as having a "stimulating and beneficial influence on the work of both teachers and students."[397] The SED, however, still maintained the official position that this division was simply a temporary expedient, and soon would become obsolete as the work of the day schools improved. What good effects the Code had were tempered by the realisation that it had not diminished the number of such classes. Also discouraging was that while the new syllabus had been credited with generally improving the quality of work, such results were not universal. Many classes could only hope to achieve, at best, mediocre results as their students attended only late at night after a taxing day's work.[398]

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[394]"Report on Continuation Classes, Southern Division, 1907" HMI Scougal, PP 1908 XXVIII, p. 750.
[395]Ibid.
[396]"Report for 1906." Scougal, p. 730.
[397]"CCES Report, 1907-08." PP 1908 XXVII, p. 32.
[398]"Report for 1907." Scougal, pp. 752-53.

During these years Division II classes experienced a decrease in enrolment across Scotland. In addition, nationwide despite Division III classes were witnessing steady, if slow, increases.[399] Most encouraging for the SED was the slow move towards establishing advanced Division III classes at central points with a view towards bringing together students who had gone through work at neighbouring Division II classes in corresponding topics.[400] Its progress, however, was thwarted by lack of money.

Although overall progress in improving the buildings and equipment for Continuation Classes had been unfortunately slow, there were some notable successes. By 1908 Heriot-Watt (discussed in Chapter 6) had a new engineering laboratory, as did the mining classes at Cowdenbeath. In addition, a new technical school at Galashiels, and a new textile school at Dunfermline were planned.[401] Ideally, however, the SED and Scottish educationalists would have preferred to see Continuation Classes, (particularly the specialised commercial and technical classes of Division III), housed in their own well-equipped premises. The advances in centralising this work should have been accompanied by corresponding building of premises with well-equipped laboratories, workshops, and classrooms designed for the needs of advanced studies. This was the ideal situation, and the reality was most often far from ideal.

Most Continuation Classes during these years continued to be relegated to using the same facilities as that of the day elementary school; this included those classes recognised as providing 'advanced specialised instruction' under Division III. In the Southern Division of the 25 such centres only 5 had their own premises. The rest used rooms in the elementary schools. Thus the good news regarding the progress in centralisation of advanced work was tempered by a state of affairs that required such centres to often make do with facilities more suited to elementary instruction.[402]

During these years there was little to indicate an ability to alter this situation. Reports from inspectors in the field revealed not only an inability, but also a general disinterest on the part of local authorities. For example, in 1906 H.M.I. Macnair stated that there was little hope that "School Boards, as at present constituted, will *ever* consent to erect buildings for technical education."[403] Nor could the County Councils be looked to for assistance. Though some good work had been done by those in

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[399]Ibid., See also, "Report for 1906." Scougal, p. 732.
[400]"CCES Report, 1907-08." p. 32.
[401]"Report for 1907." Scougal, p, 755.
[402]"Report for 1906" Scougal, pp. 732-733.
[403]Ibid., p. 732.

Stirling and Fife, in general it was reported the money available was "barely adequate to keep up the work already undertaken, and nothing can be spared for new buildings."[404]

The problems experienced by the continuation class system in Scotland during these 'interim' years after the new Continuation Class Code of 1906 and the Education Act of 1908 were accompanied by some significant successes. In addition, the problems during this time were not new. The two principal ones (students leaving upon reaching the age of 14 without earning a qualification and pupils not going directly on to Continuation Classes) had been lamented for years. However, by the eve of the new Education Act they had reached the top of the agenda. This was partly because the work of providing Continuation Classes with a definite structure and system had been accomplished. However, it was also because these problems were more detrimental than ever to truly achieving the goals the SED had set out for the system. Furthermore, despite the encouraging signs there was still a sense that many School Boards did not fully support Continuation Classes, and monetary issues bogged down further progress.

A report in 1907 by H.M.I. Fraser seems to sum up some of the background to these problems. He indicated that the lack of support for Continuation Classes, at lease in the towns and cities, was due more to lack of knowledge than any want of desire to learn on the part of young people. School Boards that did provide Continuation Classes often did not adequately promote them. They simply published a prospectus and put up posters to signal the existence of the classes. Urging attendance to pupils was often not effective. Instead, School Boards would have been better served to appeal to parents and especially businesses. In turn encouragement by parents and future employers to attend would have been more effective in convincing a student to do so than an appeal by a teacher.[405]

Part V: Renewing the Discussion over Compulsion

In the years prior to the new Education Act for Scotland the problems described above led to a renewal of the discussion over making continuation education compulsory, although not with vigour. There was already a German model to prove the feasibility and potential success of such a move. By 1907 21 out of the 26 constituent[406] parts that comprised the German Empire had compulsory attendance at continuation school for the whole or part of the student population. While the length

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[404]Ibid., p. 733.
[405]"Report for 1907." Scougal, p. 750.
[406]Twenty-five states and the Reichsland of Alsace-Lorraine.

of time required varied from district to district, attendance was required immediately following the conclusion of the elementary day school course; thus avoiding the lamentable situation of students taking one or more years off before returning to the classroom that was all too common in Scotland. In addition, in Bavaria, Wurttemberg, Saxe-Meiningen, Waldeck and in some parts of Prussia attendance was compulsory for girls as well as for boys. The five areas[407] that had voluntary attendance represented only 1/45 of the German population. The instruction in German continuation schools had become increasingly of a technical character with a direct relationship to the industrial employment of the students. Germany had over the previous thirty years clearly declared itself in favour of extending education over the adolescent years from a combination of economic interests and moral considerations that were not dissimilar to Scotland's.[408]

However, for the time being SED officials regarded such a step as yet another infringement of parent's 'rights'; many of whom contended that they already found it a hardship to maintain their children at school to the later age of 14 years. For this reason the SED turned its attention to the "nemesis" which was the business community. There were calls for businessmen to direct their apprentices to undertake Continuation Classes in connection with their work training. Though noting that cooperation from employers was "by no means as hearty as it should be"[409], there were some signs of success. For example, the SED recorded a more enlightened and receptive business community in Edinburgh. There was evidence of stimulating the interest of firms in the further education of their employees and to recognize the rewards for the business in terms of more intelligent and valuable employees. Such encouraging news was, however, all too uncommon.[410]

In the German model there was active cooperation from businessmen to reduce hours of labour during the years of apprenticeship in order to allow time off for further academic training. While there is evidence that in general German employers were more willing to provide schedules that accommodated further education and had a deeper appreciation of its benefits, the law also placed a legal duty on them. The Imperial Law of Industry of June 1891 stated:[411]

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[407]Hamburg, Bremen, Lubeck, Reuss Elder Branch, Schaumburg-Lippe.

[408]See generally, "Compulsory Attendance at Continuation Schools in Germany," Sadler, M. (ed.) Continuation Schools, pp. 513-534. "The Continuation Schools in Saxony" Dale, F. H., in Special Reports on Educational Subjects (Board of Education) Vol. I, (London, 1897).

[409]"Report for 1906." Scougal, p. 730.

[410]Ibid.

[411]"The Imperial Law of Industry, 1891" Sect. 120, as reprinted in Sadler, Continuation Schools, p. 527.

> Employers of labour are required to grant those of their employees under 18 years of age who attend a continuation school arranged by the Government of the local authority the necessary time for school attendance as prescribed by the authority in question.

German law responded to the employer who did not share an appreciation of attendance at continuation school. For example, in 1900 after many employers began hiring girls in mass to avoid regulations the above quoted section was changed to include female clerks and female apprentices. This was a startling progressive approach to female education, while also being a recognition that employers often had to be closely regulated for the good of the country. In addition to providing for compulsory attendance German law gave local authorities the power to draft regulations that would enforce compulsory attendance. This included the ability to regulate employers so as to ensure attendance at continuation schools, and the power to penalize them with fines or imprisonment of up to three days for every offence.[412]

In contrast there was no sign of such concessions on the part of Scottish employers as discussed at length in Chapter Four. Nor was there the type of legal framework to regulate employers to the same extent as in Germany. Therefore, in Scotland the issue came down to a clear choice between work and school; rather than a discussion of work and academic training.

Given this context, few discussed the long term benefits of shorter working hours for the young. Rather, the issue was framed by the short term trade-off of reduced wages for longer hours of education. In a 1907 report one inspector pointed out that a boy who is physically fit to work and to increase the household income should retain the right to do so. Shorter hours of labour in favour of longer hours of education could had a heavy burden on a household which depended on his income. Furthermore, there was no guarantee that additional education would lead to an additional increase in wages.[413] Indeed, many businessmen were unwilling to place an older, better educated boy in anything but a junior position.

This lack of support from the business community on the issue of compulsion as a whole would ultimately dictate the outcome. Those within the educational community who did favour a longer period of academic work supported their position with the long term benefits. They maintained that the intellectual and moral benefit could not be doubted. But even in this camp few would posit a definite financial reward.[414] This was due to Scottish business' indifference to compulsory continuation education, and the fundamental idea that additional academic training

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[412]Ibid., Sects. 142 & 150.
[413]"Report for 1907." Scougal, pp. 750-751.
[414]Ibid., p. 751.

made a worker correspondingly more valuable. Thus, additional schooling was not only not required, but was also not rewarded.[415]

However, other educational officials pointed out that the situation as it stood had an extremely detrimental effect on the quality of education possible at Continuation Classes. For those students that did undertake Continuation Classes (almost uniformly without an accompanying reduction in hours of labour) their ability to benefit from the academic endeavours was limited. A Sub-Inspector, Mr Wilson, cited a situation that adequately illustrated the difficulties. He wrote in 1907:[416]

> They reached home at 7 p.m...attended the class at 7.30, returned home about 10, and were up at 5 o'clock the next morning to resume their daily toil. To keep this up for a whole winter must be trying for even the most enthusiastic [student]. It does not appear that any trial has been made of the experiment suggested in a former report, whereby either employers would shorten the hours of labour for these pupils on school-days or school would be held only on Saturdays.

In order for Scottish business and industry to embrace the principle of longer years at school, or even shorter working hours to provide longer educational hours, would have required a substantial conversion in the way business as a whole viewed the training of workers. Employers in Scotland remained wedded to training 'in-house', exhibiting a consistent preference for the 'trained' worker over the 'educated' one. While this may have provided Scottish managers with a receptive work force, it did not provide them with a responsive or creative one.[417]

Part VI: The City Experience

In had long been known to the SED that Continuation Classes were not prospering in the rural areas. However, the towns and cities presented a different story. Not only did the industrial and commercial environment present more of an incentive to attend the classes, but schools in municipalities more actively recruited students and provided inducements for regular and continued attendance. Indeed one

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[415]This issue is discussed in greater depth in the previous section on Commercial Education; particularly in regards to testimony to the Edinburgh and Leith Chambers of Commerce by merchants on the issue.

[416]"Report for 1907" Scougal, p. 753.

[417]For a general discussion of this topic see, Dintenfass, M. The Decline of Industrial Britain. Chapter 3, "A Question of Skill." Roderick, G. W. & Stephens M. D., Education and Industry in the Nineteenth Century: The English Disease? Also, Kennedy, P. The Rise and Fall of the Great Powers.

inspector even said that attending had become a habit among some classes: "if one goes, his schoolfellow goes too."[418]

Of Scottish cities Edinburgh had the greatest success in Continuation Classes, due in large part to innovative schemes by the School Board to foster regularity of attendance (some of which pre-dated the new Code). For example, if a student had an 80% attendance record his fee was returned. There were also the "Miss Burton" prizes for regularity of attendance over three consecutive sessions which distributed monetary awards. It was reported that in the 1899-1900 school session 547 pupils satisfied the conditions. In one school eight of the winners had been in attendance for five years and the other five had been in attendance for four years. Inspectors also described a healthy rivalry between schools with regards to such awards.[419]

The good record of attendance continued throughout the early 20th century. In 1905 H.M.I. Robb reported that as a result of the inducements given to the schools by the Board to secure regularity of attendance a percentage as high as 97 was reached by some schools. In addition, many of the students attended despite less than advantageous circumstances. Robb reported:[420]

> In very many cases pupils come to the classes under circumstances that do them infinite credit, sempstresses direct from the workshop, message-boys straight from their business premises often with but the semblance of a meal since mid-day.

At the same time Edinburgh was able to make strides in other areas. While country districts and many small towns floundered, overall numbers in attendance at Continuation Classes in Edinburgh grew steadily over the years. Often leaps of 500 and more were witnessed between sessions. For example, in the 1905-06 session there were 3,722 students in continuation classes, and the following year there were 4,516.[421]

While Division I classes continued to be widely attended in Edinburgh, as elsewhere, the city experienced a steady diminution in them. Fewer and fewer students required the classes. This led inspectors to remark that with the upward tendency in teaching and the greater interest students took in their work, Edinburgh was moving towards the true "realisation of the place and function of such classes in the general scheme of Scottish Education." In addition, by 1905 Edinburgh had made the first tentative steps toward centralizing classes. Long encouraged by inspectors

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[418]"Report for 1900" Stewart, p. 500.
[419]Ibid.
[420]"Report for 1905" Scougal, p. 679.
[421]"Report for 1907" Scougal, p. 749.

and the SED. Edinburgh was one of only a few areas that had centres devoted solely to the work of Division III.[422]

To what could this comparatively remarkable success be attributed? Reports list a variety of factors, but all point to the work, effort, and influence of the School Board. For example, it was pointed out that the Board's selection of teachers had been very judicious, and the provision of teachers and equipment credible. In other districts poor teaching staff and insufficient equipment reduced quality, led to uninterested students, and made striving for an advanced level all but a fantasy.[423] Also while the Continuation Class Code clearly laid down the practical nature of the aims of continuation work it furnished only broad lines and general conditions as to the methods to be employed. This left a great deal of elasticity for progressive local authorities such as Edinburgh's to develop classes on lines suited to the particular businesses and requirements of the area.

Integral to achieving this end was the input and support of the local community. The Edinburgh School Board made overtures to local businessmen, and made strides in enlisting their interest in the work of the Continuation Classes. Inspectors wrote regularly of the School Board's effort to make employers "*personally* acquainted with the nature of the classes."[424] The advantage of co-operation between employers and managers of schools was widely known. However, the value of such co-operation was striking in Edinburgh. It was written in 1908 that "the attendance at Continuation Classes has increased in a marked degree, through the personal and active interest taken in it by the members of the Board and by the employers."[425] Critically in many cases the employers actively facilitated and encouraged attendance by becoming surety for the fees of their employees, and offering rewards in the form of book prizes. In some cases promotion was made dependent on progress in the continuation school as well as on efficiency in the workshop. This type of co-operation by members of the business community was regularly cited as an example worthy of imitation by other local authorities.[426]

Also fundamental to the success in Edinburgh was the nurturing of a closer connection between the Continuation Classes and the Heriot-Watt College.[427] The

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[422]"Report for 1905" Scougal, pp. 679-80.
[423]Ibid., p. 679.
[424]"Report for 1907" Scougal, p. 749.
[425]"General Report for the Year 1908 on the Continuation Classes in the Southern Division of Scotland" HMI Scougal, Scotch Education Department, Reports & c. 1908-09. p. 6.
[426]Ibid.
[427]Coordination and cooperation between continuation classes and central institutions is discussed in greater detail in the following section on Central Institutions. This includes additional discussion regarding Heriot-Watt College and the Edinburgh School Board.

School Board and College authorities begun a scheme of co-ordination between the Board's Continuation Schools and the College during the 1903-04 session. By 1908 they had released for the first time a joint Prospectus and Directory. The arrangements had born fruit. During the 1908 school year 134 students from the School Board's classes entered the College. This was up from 25 the previous year. Significantly the flow also went the other way with College students, 600 in all in 1908, transferring to Continuation Schools for specific courses; thus limiting repetition of effort between the various institutions.[428]

Part V: Final Thoughts and Conclusions

As Scotland approached the 1908 Education Act great strides had been made in the Continuation Class system of Scotland. The Continuation Class Code of 1901 was the first step towards a logical organisation of classes and encouraging systematic study of a course of subjects. Frustration over the prevalence of elementary subjects represented in Division I led the SED, in the Code of 1906, to provide a new scheme of instruction for these classes. Under this new Code these classes were more closely related to the instruction given in the Supplementary Classes. Though the SED still hoped that Division I would in time prove to be a temporary measure there was no sign of its disappearance as the years went by, except in active towns such as Edinburgh. Division II classes witnessed a slight decrease, and Division III classes experienced a corresponding increase. The SED was undecided whether the decrease in Division II classes was a thoroughly positive sign. If it was the case that more pupils were undertaking studies in Division III it could be considered such. However, if it was just a case of students foregoing instruction alogether it was a worrying sign. The fact that the overall student population was growing tended to convince officials that the former was the case. In addition, Division III classes were slowly becoming more centralized at various points throughout the country. This was accompanied by a trend toward the coordinating of the classes with the Central Institutions of the country such as Heriot-Watt.

One of the most disappointing revelations was that the instability of the system that had plagued it for years had not abated. In any given year there were great fluctuations in the number of centres offering courses. This was often not obvious from the overall statistics which demonstrated a fairly steady growth in the number of centres. Beneath these numbers lay the reality that many centres came and went from one session to another, often to return a year later. The SED had relaxed the stringent

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[428]"Report for 1908" Scougal, p. 3.

regulations as to the prescribed length of sessions in an attempt to combat the problem; especially in rural areas. Some areas took advantage of this reform, and the newly shortened session often lasted no more than 15 weeks. This, however, was not enough to cure the condition. The most worrisome effect of this persistent trend was that it rendered it nearly impossible for students in many parts of the country to undertake a continuous, systematic course of study. It also discouraged some from entering into continuation work as they could not depend on the continued existence of the class.

Yet, overall rural and urban areas faced fundamentally different problems. While rural areas continued to grapple with long standing ones such as those described above, the cities encountered new ones as well. In many cities such as Glasgow and Edinburgh, it was considered that by and large the "Continuation machinery for producing more useful citizens and more effective workers is running, and the problem for school boards is how to secure a larger supply of pupil material."[429] It would be this issue that the 1908 Act would focus upon, and that would dominate the years after its passage.

Throughout the period it was an unavoidable conclusion that the SED and its Secretaries were more progressive and forward thinking than the Scottish businessmen and industrialists that they sought to serve through the reforms. The latter's resistance to change and their undervaluing of academic training placed serious restrictions on the progress and success of the Continuation Class system. Many inspectors and officials pointed, however, to the young people themselves. They were accused of being lazy, unmotivated, of having an inordinate love of sport and lacking an appreciation of the worth of education. However, such criticisms ignored the fact that these adolescents were simply fulfilling the expectations of their future employers. In doing so they showed themselves to be cognizant of the demands placed upon them by the labour market, even if those demands were not terribly strenuous.

The other unmistakeable trend was the adherence to local control. This state of affairs would be more or less confirmed by the 1908 Act and the years thereafter. With historical roots in the parish school system, Scotland found it difficult to move toward a more centralized, less local control of continuation education. To be sure, educational policy making did gravitate toward Dover House. However, there remained a strong resistance to it. Some critics would claim that this was because the SED was in London when it rightfully should have been in Edinburgh. The true basis of this attachment to local control was the unfailing belief that those "on the ground" in the areas had a better understanding of, and were more responsive to, local needs.

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[429]"Report for 1908" Scougal, p. 5.

One result of this was that the areas for educational authorities would not be enlarged in the 1908 Act. Another was that localities (city and at times county areas) with active and aggressive school boards or county councils had better organised and more efficient Continuation Classes. For example, in Fife and Kinross, (the only other county area in addition to Midlothian which made an attempt to organize the continuation work as a whole) the classes were well organized and effective. In Kirkcaldy the county Technical Education Committee assisted promising students to continue their studies at Division III centres and the day classes of the Technical College.[430] Also, those authorities, such as Edinburgh, which had previously been successful in this area, continued to be so.

Craik certainly would have preferred a different outcome; as he would express to Parliament in May 1908. He once claimed that small areas would of necessity mean small thinking, blind to the larger view. Politics and tradition meant that many of the most important decisions, including spending on technical education, had remained the province of individual, often small, school boards. While the 1908 Act would bring tremendous changes to Continuation Classes, this fundamental attachment to local control would remain.

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[430]Ibid., p. 4.

Chapter 6: Continuation Classes from 1908-1914

Part I: The Education (Scotland) Act of 1908.

The monumental Education (Scotland) Act of 1908 was not solely concerned with continuation education. Many of the problems were not addressed at all; the SED long favouring to attack them by means of Departmental policy via such devices as circulars rather than legislative tools per se. Two crucial clauses of the Act did bring the possibility of substantial change and improvement for the Continuation Class system; though the adequacy of them would be long debated. Indeed, the very reason they became law employed logic predominantly absent from the debate that preceded the Bill. Sections 9 and 10 of the 1908 Act combined to address two central issues: the adequate provision of continuation schools throughout the country, and the old debate over compulsion.[431]

Just prior to the Education Bill being debated a report stated that the Continuation Class system in Scotland was well established in the larger towns, although there was still a regrettable instability in the country districts. In the latter, classes would regularly appear one session only to disappear the next, and many were dropped before a single class could be taught. However, the report proclaimed that the system was at a point where there was no sign of increase in separate centres, nor was there suggestion that there was particular need of drastic increase.[432] Despite this the Education Act embodied a provision under Section 10 that made it the duty of each School Board to provide suitable provisions for Continuation Classes. The SED stated that this provision was in response to the many School Boards that had neglected the duty despite the generous grants that were available. Indeed, in the more remote Highlands the grants amounted to a total of seven-eighths of the total expenditure on the classes.[433] Section 10, subsection (1) declared:[434]

> Without prejudice to any other power of a school board to provide instruction in continuation classes, it shall be the duty of a school board to make suitable provision of continuation classes for the further instruction of young persons above the age of fourteen with reference to the crafts and industries as the school board, with the consent of the Department, may select, and also for their instruction in the English language and literature.

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[431]See generally, "Education (Scotland) Act, 1908" 8 Edward 7, Chapter 63. Reprinted in, Graham, J. E. The Education (Scotland) Act, 1908: and Acts Relating Thereto. Sections 9 & 10, pp. 13-18.
[432]"CCES Report, 1908-09." PP 1909 XXI, pp. 36-37.
[433]"Memorandum Explanatory of the Education (Scotland) Bill, 1908." PP 1908 LXXXVI, p. 2.
[434]"Education (Scotland) Act, 1908." Section 10 (1), p. 15.

In addition, the board had to make provision for their instruction in "the laws of health" and for physical training. How was the Department to monitor and enforce this provision? The simple answer is that they would not. Subsection (2) made it clear that it was up to rate-payers (10 being the required number) to petition the SED if a school board was persistently failing in their duty to provide Continuation Classes. Consequently the SED would make an inquiry, call upon the Board to institute the necessary classes, and withhold grants to the Board if it failed to do so.

Yet by putting the onus upon the rate-payers the SED was in essence abdicating its oversight role and duty to guarantee the availability of Continuation Classes everywhere in Scotland. The glaring omission was two-fold. First, it failed to address the need to stimulate interest in continuation education in many sectors of the country. If the rate-payers under a school board were not interested in such classes, either through ignorance or neglect, they were to remain blissfully such. Second, upon the petition of the 10 rate-payers the SED would make an inquiry. As the SED would at this point already be aware of the lack of Continuation Classes, the inquiry would only serve to determine if it was desirable to force the Board to institute classes. Thus, a Board could testify that because of distance, weather, population, etc. that it was not expedient to institute classes and have its decision upheld; then even the 10 rate-payers would go unfulfilled.

More important was the Act's move toward embracing some form of compulsory attendance. Section 9 dealt with the pupil who had been exempted from attending day school under the 1901 Act. Previously a school board had the authority to impose as a condition of this exemption that the child attend Continuation Classes to the age of 14. Under the new section the school board could now compel attendance to the age of 16 years. Under section 10 mandatory attendance to 17 years of age was possible. While details of the exact provisions of this section and section 9 will be discussed more fully below it is important to recognise at the outset that this was done in part as an experiment. At the same time the more mature system of continuation schools in England was also debating the issue of compulsory attendance at Continuation Classes. This Scottish model was in part a testing ground for any future English moves in a similar direction.[435]

As it represented a more radical departure from the traditional role and relationship of government in regards to business training methods it was a hotly debated issue when the Bill came before Parliament. When Craik commented on the

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[435]See generally, Sandiford, P. "Compulsory Continuation Schools" University Review, April, 1907. "Should Attendance at Continuation School be made Compulsory in England" in Sadler, M. E. Continuation Schools pp. 689-749.

Bill during its second reading in May of 1908 he revealed the SED's desire to centralize control and resolve the issue of compulsory attendance to the age of 17 years. He urged Parliament to take on the issue of mandatory attendance, rather than leave it to the decision of 984 separate school boards.[436]

Obviously a majority agreed with the basic concept, but there was not a consensus on taking the decision away from the Scottish school boards. Again, the tradition of local control ran deep. Also, the reasons for advocating the measure were deeply varied. Indeed, it can be said that there was no intellectual consensus on why such a provision was attractive, nor if it went far enough. The highly respected Haldane was one of the first to speak on the topic. In his remarks to Parliament he drew upon issues of industrial efficiency and international competition. In Haldane's view one of the greatest flaws in the Scottish education system was that a gap had formed between the elementary schools and higher studies, especially in science and technology, which few could overcome. Mandatory continuation education would be a positive step towards bridging that gap.[437]

Haldane's inspiration for demanding this bridge was not, however, the long cherished Scottish tradition of an education system providing a ladder from gutter to university. Rather the impetus was once again the Germans. In his presentation to Parliament he exalted the German employer's practice of not only encouraging their charges to go to such classes, but giving them time off during the work day to do so. "The result has been that there are parts of Germany where 98 per cent go to the continuation schools," and the employers have found it a great advantage.[438] The education offered not only promoted the "culture of the mind" but also the practical applications and the trade of the student. The outcome would be a more highly skilled work force, as witnessed in Germany. In the House of Lords the influence of the German system was also felt, as was the fact that Scotland was years behind them on this subject. It was stated there:[439]

> The compulsory attendance at continuation schools has been in vogue in many German states for upward of a quarter of a century, and it has been found to be of the greatest benefit there, not only by the authorities, but also...by the working classes.

Others agreed with Haldane's views recognizing the educational efficiency of such a measure. In the House of Lords the longtime advocate of Scottish education

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[436]Parl. Deb. 4th ser. Vol. 188, May 5, 1908. 85.
[437]Ibid., 99-100.
[438]Ibid., 99.
[439]Parl. Deb. 4th ser. Vol. 198, Dec. 7, 1908. 8.

Lord Balfour of Burleigh based his support for the provision on the waste that occurred when children left school at a young age. The result was that the education received was soon forgotten without profit. Many in the Lords and House agreed with this view. Lord Herschell, for example, stated:[440]

> It is looked upon as a means of ensuring that the original outlay expended upon a child's education shall not be thrown away owing to the fact that the child at the age of fourteen suddenly gives up receiving any instruction at all.

This reflected a wide-spread belief that Continuation Classes should act to re-enforce the elementary education of the pupils in order to assure its permanence, rather than strive to introduce more advanced specialised studies. While this may have accurately reflected the current function of many of the classes, it was not in line with the SED's vision of the role Continuation Classes should play in the life of the nation.

However, when Haldane was quizzed about the inclusion of a clause requiring employers to allow time off for schooling he was left to defend the weakness of the clause. There was no such requirement. Indeed, the provision simply depended on employers turning their backs on years of tradition, a factor history had proved to be lacking. Haldane was forced to plead the wisdom of moving slowly and cautiously in such matters.

Indeed, the Bill did not even make compulsory attendance mandatory. Despite Craik's admonishing Parliament to take the decision out of the hands of hundreds of separate school boards, the provision actually gave the decision right back to them. It was within their province to make bye-laws requiring attendance. Compulsory attendance for exempted students until the age of 16 was at the discretion of the school board, as was attendance until the age of 17 for those "not otherwise receiving a suitable education, or...not specially exempted from the operation of the bye-laws."[441] Haldane had to concede that the hoped for positive effects of the legislation would only occur *if* the school boards took "advantage of the provisions of the Bill."[442]

In the end, Haldane also had to admit that the clause was very elastic. He pointed out that such a measure was entirely new, and as such it would be a great mistake to set up a "cast-iron" system. The necessary, yet absent condition had to be acknowledged: public opinion in Scotland was not yet ripe for a true mandate on compulsory attendance at Continuation Classes. That was the missing element between Scotland and Germany. Interestingly enough, the majority of other MPs who

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[440]Ibid., 8.

[441]"Education (Scotland) Act 1908." Section 10 (3), p. 16. Also see Section 9 (1), pp. 13-14, for regulations relating to pupils exempted from day school.

[442]Parl. Deb. Vol. 188. 100.

supported compulsion did not necessarily adopt Haldane's reasons for the propriety of the measure. Few focused on the educational issues, or the benefits to the industrial and commercial efficiency of the nation, nor even the compelling example of continental nations. Instead, attendance at Continuation Classes up to the age of 17 years was seen as socially beneficial by the majority of MPs. In support of the measure Munro Ferguson of Leith said: "the way in which children from fourteen to seventeen nowadays found their way on to the streets after their day's work...was one of the most serious menaces to our civilisation."[443] In the House of Lords the peers echoed this sentiment. Lord Herschell speaking on the matter said that children being released from school at the age of 14 was "extremely deleterious to the character of the child...[and] a most potent factor in the growth of hooliganism in our larger cities."[444] Thus, the measure was seen by many MPs and members of the House of Lords as more of a way to occupy children's time to keep them out of trouble than to impart education.

It should not be imagined that moving towards compulsory attendance was without its opponents. The Labour Party as a whole took a stand against it. Mr. Barnes of Glasgow, Blackfriars spoke for the party during the second reading. In making the Party's case he referred to the "over-strain" it would cause, but the crux of the opposition was based on the rights of the poor. Far from helping the working class such a measure would unfairly burden them. It was simply not fair to a poor child, and his poor parents, to be compelled to attend classes after a long day's labour.[445] The alternative was longer compulsory attendance without the spectre of demanding employment.

Others who opposed compulsion pointed out the difficulties that would arise. In many areas of the country, due to distances and weather, it would be nearly impossible to actually enforce attendance; let alone convince a school board to mandate it. Another contingent represented by MPs such as Dundas White of Dumbartonshire, objected on the grounds that there was no public demand for such a measure, or even for "this class of education."[446] MP Walsh agreed with these sentiments stressing that Parliament should be pre-eminently interested in protecting the rights of the children and the parents. Nor was there a demand for such a proposal. He stated that he had recently visited Scotland and had not "seen any effective expression given to such a demand."[447]

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[443]Ibid.
[444]Parl. Deb. Vol. 198. 8.
[445]Parl. Deb. Vol. 188. 122.
[446]Ibid., 160.
[447]Ibid., 162.

Thus. during this debate Parliament had to deal with one of the most crucial issues of democratic institutions. Are policies to be passed and implemented only when there is a clear mandate from the electorate for such a measure? Or does Parliament have a duty to craft legislation that is in the interest of the country even when public demand is absent? Further, if the later course is taken, what are the chances that it will be adequately enforced, especially when it is at the discretion of local school boards to take action? In the end, Parliament determined that it had to lead, although somewhat tentatively, public opinion; though the local school board would remain the final arbitrator of the measure.

The glaring deficiency of the legislation, as discussed above, was the fact that it did not actually mandate compulsory attendance. The Act only empowered local school boards to adopt bye-laws that would require attendance at their discretion in two cases. Under the 1901 Act school boards already had the power to require students who had been exempted from day classes to attend until the age of 14. Under the 1908 Act a school board had the option of requiring such students to attend to the later age of 16. This was based on the assumption, as pointed out by Thomas Shaw, that after exemption the student was really a half-timer. Thus, if the Code normally required attendance until the age of 14, a student exempted at 12 years of age should be required to attend an addition four years to compensate.[448] It made perfect sense; except for the fact that school boards could simply choose to ignore it.

The second situation was more encompassing. A school board had the power to require attendance at Continuation Classes for all students not undertaking other education up to the age of 17. Like the situation above, there was no mandate to school boards. It was totally at their discretion. In addition, they could choose to implement compulsory attendance to *any* age *up to* 17. MP Gulland stated during Parliamentary discussion on the subject that he could imagine that some of the more progressive school boards would begin by making attendance compulsory up to 15 years of age, and gradually try to educate public opinion. However, the other boards would probably not avail themselves of the section at all.[449]

It was recognised that school boards often lacked the will or the ability to enforce attendance on an unwilling populace; especially if it was an unpopular measure that would further reduce an income. However, a certain irony was not missed by some MPs. While there was an enforcement mechanism to make school boards institute Continuation Classes under Section 10 (2) there was no corresponding mechanism for attendance.

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[448]Parl. Deb. 4th ser. Vol. 196, Nov. 10, 1908. 183.
[449]Parl. Deb. Vol. 188. 139.

Subsequent explanations from the SED seem to reveal that the measure was taken out of frustration. It recognised that uniform compulsion was practically impossible given the varying nature of the acceptance of Continuation Classes, and the tradition of local control of education in Scotland. Yet it also conceded that despite all the efforts and reforms to reorganise and improve Continuation Classes they were still not living up to its expectations. Shortly after the Bill became law the SED wrote:[450]

> large sections of young people who would benefit most from attendance at these classes are not touched by them. In many cases everything has been done that can be done by proper organisation and by rousing the interest of the public to further attendance at these classes, and it is considered that the time is now ripe for a certain measure of compulsion. Without the further education directed to the needs of every-day occupation which the continuation classes are intended to supply, the heavy expenditure incurred in educating children up to the age of fourteen is largely thrown away.

As Lord Herschell succinctly lamented, the question was whether sufficient encouragement was given to local school boards to adopt the provisions of the Act.[451]

Those school boards that did opt to adopt a form of compulsory attendance still had to deal with resistance from business, and possibly the children themselves who often preferred employment over further education. With regard to the latter the school boards had little recourse. The young person could not be prosecuted if he failed to comply under either of the scenarios for compulsion described above. Action could only be taken against a parent if "wilful default" or "habitual neglect to exercise due care" could be proven.[452] This was a standard that all confessed would be difficult to demonstrate.

However, with regards to the employers of the country steps were taken to insure compliance. First, in the case of the exempted pupils employers were forbidden to "knowingly employ" them at a time when their attendance was required at a Continuation Class.[453] The case was the same for a pupil coming under a school board bye-law, but these measures were somewhat meaningless. Even the SED realized that employers normally employed young people during the day, leaving their evenings free to attend Continuation Classes. Thus, compliance was easy, and in general it was already a reality.

The biggest step taken by the 1908 Act was an attempt to limit the amount of work time that a young person could undertake when they were subject to compulsory

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[450]"Memorandum." PP 1908 LXXXVI, p. 2.
[451]Parl. Deb. Vol. 198. 8.
[452]"Education (Scotland) Act, 1908." Section 9 (4), p. 14.
[453]Ibid., Section 9 (3).

attendance at Continuation Classes. Drawing from the German experience, worries of over-strain for students attending after a long day's work, and complaints of poor academic performance from such students, the SED and Parliament instituted work limitations under both Sections 9 and 10. The attitudes of employers could not be legislated, nor did the authorities feel that it was prudent to attempt to force employers to allow time off during the day for continuation work as was often the case in Germany. Despite this belief it should be pointed out that a small number of employers did allow time off for classes. A good example of this was S. Higginbotham & Co. Ltd. Springfield Works, Glasgow, which not only allowed time off for its workers, but also paid their fees to the Incorporated Weaving, Dyeing & Printing College in Glasgow.[454] Normally this occurred when a young person was in a clearly defined apprenticeship which required extra work in the classroom. This was not the norm though.

During the debate in Parliament MP Gulland indicated that there was a hope that the new provision would encourage more employers to follow this route.[455] What could be done was to reckon the educational period into the maximum factory time allowed by law. Under both sections employers were forbidden to employ a young person for a number of hours which when taken together with the time they were required to attend Continuation Classes exceeded, in any day or week, the period of employment permitted by any Act of Parliament. Thus, hours spent in school were considered by law as hours of work. Employers were subject to fines which became greater for subsequent offences.[456] It was a move widely welcomed by educationalists across the country.

The only limitation to these provisions was that it only applied to students required to attend Continuation Classes under a bye-law enacted by a local school board under the 1908 Act. All other students were not covered and there was no incentives for employers to limit their working hours in order to accommodate further education. Once again the whole system seemed to be hinged on the actions of the hundreds of separate school boards and not the SED.

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[454]Memorandums [7] dated 4th Oct. 1906, from S. Higginbotham to J. McDonald, IWD & P College. G/12/9.
[455]Parl. Deb. Vol. 188, 139.
[456]"Education (Scotland) Act, 1908." Sections 9 (3) and 10 (5), p. 14 & 17.

Part II: Immediate Aftermath of the 1908 Act

No one believed the Education (Scotland) Act of 1908 would be a panacea for the problems of the Continuation Class system. As discussed at length above, many reforms had taken place prior to the Act in order to better organise the classes, make them more efficient, and more relevant to the working classes that were their predominant users. Some of the progress of Continuation Classes in the period after the 1908 Act was certainly attributable to these earlier reforms. The problems addressed by the Act were long standing, and in some sense were attributable to attitudes that had restrained the progress of Continuation Classes. Thus, immediate change was unreasonable, and was not widely anticipated.

However, one area in which there was an almost immediate change was in the number of centres providing Continuation Classes. Despite the pre-1908 pronouncement that the system was so well established that an increase in centres should not be expected there was a dramatic jump after the Act. Growth for several years prior to the Act had been sluggish, and at times non-existent. The year following the Act, however, witnessed a 40% increase in separate centres from 755 to 1,055.[457] In addition, the SED's suspicion that many school boards were not fulfilling their duty to supply Continuation Classes was proven to be correct. The number of school boards instituting classes had risen to 529 from 305 in the 1908-09 session.[458] Obviously despite all the efforts of the Department between 1901 and 1908 there was still a great deal of potential for growth in the Continuation Class system of Scotland. The 1908 Act appeared to act as an effective catalyst.

Other problems stubbornly remained. Day continuation courses remained in short supply. It had been hoped that securing the status of these classes would increase attendance, legitimate continuation education, and more fully integrate these classes in the life of the nation. Businessmen and industrialists again received much of the blame for the failure of day classes. It was noted that the business and industrial community of Scotland was the *single biggest* obstacle to putting this section of Continuation Classes on the solid footing they have long be trying to achieve. Yet educational authorities bore some of the blame; primarily for not making overtures to the local employers. It was written just after the 1908 Act that "the sooner each local educational authority sets to work in conjunction with the local employers to settle the details of its Continuation system, the better it will be for the community."[459]

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[457]"CCES Report for 1909-1910." PP 1910 XXVI, p. 19.
[458]Ibid.
[459]"Report for 1908." Scougal, p. 5.

Division I classes remained large in number, and there was no sign they could be done away with soon. With regards to Division II, despite attempts to emphasize, encourage, and even require that pupils be entered upon a systematic course of study, Scougal reported that "it is clear that 'single-subject teaching' still predominates, and that there is little change in the attitude of the pupils."[460]

However, Division I provided the cause for greatest concern. This was because of a seemingly new phenomenon: an even larger proportion of the Division was made up of pupils exempted from attendance at day under the terms of the 1901 Act on condition that they attend Continuation Classes. They simply passed the time until their 14 birthday and then left. Therefore, there was no sense that the large numbers in this division were using it as a starting point to move upwards through the ranks of classes. In general, they also were less receptive to instruction.

The situation seemed to be most acute in the industrial West. In Paisley, Johnstone, and notably in the parish of Neilston, a very high proportion of Division I classes consisted of exempts. This was due in large part to school boards that liberally dispensed exemptions. The exempted pupils then put in an unwilling appearance at the Evening School. Such was the case of the Neilston Board. In one Neilston Continuation Class 24 of 34 pupils in Division I were exempts, and 17 of the 24 were girls who worked in a local mill from 6 a.m. till 6 p.m. and attended the Continuation Classes for two hours three times a week. An inspector remarked that given this state of affairs, the students "can hardly be blamed if they do not take eagerly to their work."[461]

At Cross Arthurlie School, Barrhead, 62 out of the 109 pupils were exempts. The task of educating these pupils presented even more of a challenge because of debilitating work schedules. Many of the girls were employed in the mills at Neilston. They rose at 4.30 a.m. in order to catch their train. At 6.30 p.m. they reached home again, and at 7.30 p.m. they were due at the classes. They often did not get home from school till nearly 10 p.m., leaving a maximum of 6 1/2 hours of sleep per day.[462]

The same state of affairs was frequently met with in Lanarkshire mining villages. Young boys exempted from school on condition of attending an evening Continuation Class went down the mine to work alongside their fathers, and after a long day of exhausting work had to go to class. Their compulsory presence was considered little short of cruelty, and they often fell asleep from sheer exhaustion. It

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[460]Ibid., p. 7.
[461]"Report on Continuation Classes, Western Division, 1913" HMI Andrew, Reports &c. issued 1908-09. pp. 14-15. [Quoting HMI Fraser, and noting comments of George Murray].
[462]Ibid., p. 15. [Refering to a report by HMI Burdon].

was utterly futile to expect satisfactory educational results under such conditions. It was precisely such enduring conditions that led education officials and inspectors to encourage the further expansion of day Continuation Classes. Also, it was felt that it was on just such points that employers could co-operate most effectively with school managers.

Despite the problems of exempts and debilitating work schedules, in the immediate wake of the 1908 Actit was the opinion of inspectors that the type of pupil in attendance at Division I classes was generally improving. For example, H.M.I. Andrew said:[463]

> My colleagues have formed the opinion, and my own experience agrees with it, that there is improvement noticeable in the Division I. type of pupil. One may still, of course, find individual pupils who have little reading, and less writing to show as the result of their day schooling, but these cases are becoming rarer, and the pupils, when discovered, have generally allowed a few years to elapse between leaving school and resuming evening study.

Andrew added that the overall need for Division I courses was on the wane in Lanarkshire, and those students that spent more than one year in the classes of the division was decreasing. Other inspectors brushed aside the criticisms of the unhealthy educational tone that often accompanied attendance of the "exempts". In their opinion:[464]

> The importance of gathering in the multitude of young people who at present spend their time loafing about the streets, so that their mind and bodies may be trained and their characters developed, must outweigh all other considerations.

It should not be supposed that progress in Division I classes was universally reported by inspectors. In the Ayrshire District H.M.I. Lobban related that Division I classes were almost solely occupied by poorly prepared and motivated exempted pupils. The same was the case in Govan and Dumbarton, where the attainments of the pupils were described as "astonishingly meagre."[465]

During this period, much as before the Act, there were pockets of co-operation by employers with regards to hours of work and general interest in the classes. Such was the case in Paisley were many firms were reported to be awake to their duties. In Dumfries firms donated prizes and regularly visited schools. Yet there seemed to be a universal recognition that there was ample room for greater participation and co-

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[463]Ibid., p. 16.
[464]Ibid., p. 19.
[465]Ibid., pp. 22-23. [Referring to report of HMI Harvey in Govan & Dumbarton.]

operation by Scottish industry.[466] This would be a major focus of active School Boards down to 1914.

It should not be forgotten that even prior to the 1908 Act Division III courses seemed to be more secure. This trend continued after the Act in established centres such as Glasgow and Edinburgh. Although the scenario described above was more common in areas outside of these cities, there were exceptions where Division III work prospered. Mining classes at this level in Ayrshire were well regulated, spread throughout the county in smaller centres, and were related and led to more advanced work in the larger schools in Ayr and Kilmarnock. In addition, Airdrie, Coatbridge, Hamilton, and Motherwell Higher Grade Schools were busy centres of well-organised Continuation Classes.[467]

What of the ability to implement compulsory attendance given to school boards by the 1908 Act? The following year the SED released a circular that encouraged school boards to join with other local agencies including employers to decide whether compulsion was necessary.[468] Yet there seemed to be little public interest or enthusiasm for the new measures; which is not much of a surprise as there was little demand for the powers prior to the Act. There was little pressure from the SED on school boards to adopt the measures, and other than a few rural ones which were allowed to use Supplementary Courses as Continuation Classes few did. This issue would dominate discussion during the years from 1910-1914 due to the large numbers of youth who continued to remain outside the system. One survey concluded that 51% of 14 to 18 year olds in Edinburgh attended no formal education, and in Greenock the figure stood at nearly 75%.[469]

Part III: Major Trends From 1910-World War I

The years between 1910 and the beginning of World War I were fertile ones for continuation education in Scotland; indeed more so than any other single topic or area of Scottish education. Throughout these years the 1908 Act had proved to be a powerful stimulus for continuation education, and it was regularly praised for the effect it had.[470] In addition to the national growth, individual cities had experienced impressive growth. For example, in Edinburgh attendance had risen from 3700 to 8700 in the four years to 1910, with Glasgow, Aberdeen, and Govan not far behind. Indeed, Continuation Classes were considered "the outstanding feature of educational

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[466]Ibid., p. 21.
[467]Ibid., "HMI Young on Art, Science, and Technology Classes" p. 29.
[468]"CCES Report for 1908-09" Minutes and Circulars, PP 1909 XXXI pp. 55-59.
[469]"CCES Report for 1910-11" PP 1911 XXXIII, p. 28; EN March 17, 1911, p. 273.
[470]"CCES Report for 1910-11" p. 20.

progress in Scotland."[471] In 1910 this progress was officially recognised by the Secretary for Scotland. In a letter read at the formal opening of an exhibition of work done in Edinburgh Continuation Classes he congratulated the city on its accomplishments.[472]

Major cities were not the only areas to partake of this growth. By 1911 there were 44 centres (against 33 the previous year) in Perthshire. District 2 of the Southern Division, which included Haddingtonshire and some of the rural parishes of Midlothian, had also experienced growth, though it was chiefly due to the establishment in rural districts of classes of a somewhat elementary type which did not form part of any organised and graduated system of continuation study.[473]

Despite the few hopeful signs from rural areas, the real progress and growth had been, and would continue throughout the period, to be in a few urban centres where there existed especially favourable conditions. Despite this progress all were not impressed. One critic claimed that all of the legislative work of the 1908 Act, the official circulars, and other work of the SED and individual school boards was little more that "a magnificent display of educational pyrotechnics." While it might have impressed the admiring onlooker, in Shakespearian terms it signified nothing.[474] This assertion was directed at a perceived gap between the school and the workshop; a criticism with some merit that would be addressed by active Boards in the coming years. This criticism aside, the greatest accomplishment may having been raising the overall awareness of and interest in continuation education. One writer described how it had "leapt into national importance." It was felt that the 1908 Act had crystallized a movement that was in the midst of passing "from the stage of initiation and of experiment into the second and later stage of practical utility and success."[475]

The Continuation Class Codes of 1909 and 1910 represented the last significant changes by the SED to the system for years to come. In 1909 a preparatory year was added to Division 3. There was no explanation for why it was added, or what specific purpose it would serve. While only speculation, it seemed reasonable to conclude that it was in an effort to make Division III courses more accessible. The requirements to get in under Art. 25 specified that the new year was for students who were (a) over the the age of 15, or who have been one year in (b) an approved

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[471]"Forward Movement in Continuation Schools" McNally, D. EN May 13, 1910, p. 463. [McNally was the Organiser of Continuation Classes for the Edinburgh School Board.]

[472]"The Forward Movement in Continuation School Education; Important Official Letter by the Secretary for Scotland" EN Apr. 8, 1910, p. 362.

[473]"Repot on Continuation Classes, Southern Division, 1911" Jamieson, Reports & c. issued in 1911-12. p. 3.

[474]"Continuation Schools and Classes in 1910." EN Sep. 9, 1910, p. 882.

[475]"The Next Great Step in Education" EN Sep. 6, 1912, p. 769.

Supplementary Course; or (c) an approved Intermediate Course; or who had (d) passed successfully through a Division I. course and obtained a certificate of satisfactory proficiency. Students who had passed successfully through the preparatory or any other year of a course in Division III. were eligible for admission to the succeeding year of the course. In addition, students who had been two years in an approved Supplementary Course and had gained a Certificate of Merit; or (b) who had been two years in an approved Intermediate Course could gain admission to the first year of a Division III. course. Those with an Intermediate Certificate could enter the second year of a Division III course.[476]

While these measures would ultimately lead to a profound increase in enrolment in Division III classes, at least when the preparatory year is added, they were not met with enthusiasm from the Scottish educational community. McNally, the Organiser of the Edinburgh Board's Continuation Classes, questioned the unexplained appearance of a preparatory year and its unstated purpose, as well as a raising of the standard for admission for the succeeding years. He claimed that the changes "tended to throw out of gear the existing organisation of many School Boards", and that the qualifications required of students entering Division III were unduly exacting.[477]

When the Code of 1910 was issued there was an expectation that an effort would be made to straighten out matters. McNally noted with satisfaction evidence of an honest desire by the SED to not only correct problems, but also "to consider the difficulties of teachers and managers, and generally to ease the task of organisation."[478] In the Code of 1909 the conditions for admission to the preparatory year of Division III. were actually easier than those for admission to Division II. This anomaly was removed, with equal requirements applying to both Division II and to the Division III preparatory course. The possession of a Certificate of Merit was no longer insisted upon in the case of pupils under 16 years of age, attendance for one year in an approved Supplementary Course being accepted instead, thus removing what had always been felt to be a hardship.[479]

Age requirements were also changed to 17 years for Division III and 16 years for the preparatory year. However, while raising the age the SED also loosened the academic requirements. Authorities had complained that there were many boys of 17 years who could have benefited from the instruction, but who had not had a chance to

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[476]"Code of Regulations for Continuation Classes, 1909" Articles 25 , 26, 27 & 28, Reports, & c. issued in 1908-09. GEB.5, p. 12.

[477]"Forward Movement in Continuation Schools" McNally, D. EN May 13, 1910, p. 463.

[478]Ibid.

[479]Ibid., p. 464; "Code of Regulations for Continuation Classes, 1910" Reports, & c., issued in 1909-10. pp. 12-13.

gain a MC. A student over 17 years of age could enter the division if he was certified by a H.M. Inspector to be qualified to benefit by the instruction.[480]

Many individuals had complained strenuously about the SED's constant changing of the Code; especially when Continuation Classes seemed to be doing well. When the Code for 1911 was released without significant changes[481] commentators noted with an unhidden degree of pleasure that the Code represented "a certain measure of finality", and that "school managers and teachers may reasonably consider that arrangements made for the current year will be allowed to continue in the future without any serious changes."[482] Others, including McNally, openly hoped that the new Code indicated that the SED would "be compelled in the interests of all concerned to 'cease from troubling'."[483]

Indeed, the Code of 1911 did signal the end of the SED's 'troubling' with the Code, and it remained basically unchanged throughout the rest of the period. This, however, did not mean that Continuation Classes themselves remained static. Following on from the tremendous growth after the institution of the 1908 Act and the changes to the Code, four topics dominated continuation education. First, the problem of individuals not taking up Continuation Classes directly after finishing day school; a problem commonly called "leakage."[484] Second, the issue of boy labour, and the long-standing problem of loafers and hooligans. The third issue was the nature of the classes, which stemmed from a new drive for trade schools and vocational classes. All of these topics were closely related to, and contributed to the issue that predominated during the era: compulsion. This final subject encompassed a variety of old topics that would ultimately remain unresolved when war put a temporary end to progress. They included the active role of school boards in implementing bye-laws to make attendance compulsory, the lack of day Continuation Classes, and most importantly the attitude and role of Scottish businesses in the Continuation Class system.

Although often discussed in isolation, all four topics had a common thread running through them: what to do with the large proportion of young people who were not in any type of education after the age of 14, and how to get them into the

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[480]Ibid., p. 13.

[481]See generally, "Code of Regulations for Continuation Classes, 1911" Reports & c., issued in 1910-11, p.7.

[482]"Continuation Classes and Compulsion" EN Jun. 2, 1911, p. 571.

[483]Ibid. See also, "Code for Continuation Classes, 1911" McNally, EN Jun. 2, 1911, p. 555; "Changes in the Code at a Glance" EN Mar. 24, 1911, pp. 284-86.

[484]The term "leakage" was also frequently used to refer to the general condition of students not taking up Continuation Classes after day school; particularly with regards to those who had not gained a Merit Certificate.

Continuation Class system. For example, in 1911 'successful' centres such as Edinburgh, St. Andrews, and Dysart the proportion of adolescents receiving some type of education in either day or evening schools had reached between 50 and 65%. Elsewhere the proportion was much smaller, sometimes as low as 25%. Many believed that in the successful centres "the residue of 40% or so" could only be reached by the methods of compulsion. Others argued that before embracing compulsion more should be done to encourage voluntary attendance.[485]

Trade classes were seen as an avenue to replace the loss of the traditional apprenticeships, and thus provide education for individuals who were either not working or trained for no particular trade. The problem of leakage was old, but took on new significance when trying to not only raise the level of education in Continuation Classes, but also deal with the third topic of young loafers and hooligans. Compulsion was seen as the ultimate step to secure longer years of education, and thus deal with all these problems. However, as the 1908 Act left it up to individual school boards to adopt compulsion it was outside of the control of the SED. In turn, many individuals feared that compulsion would ultimately only lead to a lowering of the standards of Continuation Classes.

In 1910 even the Prime Minister found cause to comment on the number of young boys not in school and the gap that remained between elementary and Continuation Classes or job training. Describing this situation as the darkest blot and the most fatal gap in the educational system, the PM encouraged action on the matter. In a speech in Edinburgh he referred to a recent visit to Glasgow. He said that one of the most tragic sights in the cities was:[486]

> the boy sitting on the tail-end of a van, reading some trashy story, forgetting every day more and more what he was taught at school, receiving no training of any kind for any permanent calling, rapidly graduating as soon as his present precarious and short-lived occupation comes to an end for a place in the school of the unemployable.

As the problem continued through to the end of the period it became apparent that what was at issue was the very nature of the Scottish educational system. Theoretically, the ambitious youth could find his way from village Continuation Classes to the highest levels of instruction at the Central Institutions. Critics, however, contended that was "true largely in theory only," and it was only a truly "exceptional youth" who could gain the full advantage of such a complete course. Thus, future development of the system had to focus on filling in the great gaps in the

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[485]"Report on Continuation Classes, Southern Division, 1911" Jamieson, p. 4.
[486]"The Prime Minister on Scottish Education" EN Dec. 23, 1910, p. 1134.

system that allowed leakage to occur. But these same critics contended that no real progress would be as long as the current School Boards were retained. It was placed on their shoulders to address such problems, but they had proved to be unable to deal with the duties entrusted to them. Indeed, some argued that the Boards and the authority entrusted to them had become a "positive hindrance" to addressing such problems.[487]

However, the critics, while rightfully highlighting the continuance of the problem, did not give credit to the progress that was made, as sparse as it may have been. While it remained the province of individual Boards to address the issue of leakage as they saw fit, some employed effective and inventive methods. Edinburgh in particular had made progress on the issue. The appointment of an official whose duties included trying to deal with the problem of "leakage" had paid dividends, as had the introduction of 'fixed dates' at which children could leave school. The latter method insured that leaving dates corresponded to starting dates for Continuation Class sessions. In addition, the Board regularly held meetings of outgoing pupils and their parents at which their further education and choice of occupation were discussed.[488]

Edinburgh's efforts were admittedly extraordinary. In addition, they were part of a larger policy, discussed below, to raise levels of attendance through voluntary methods, and thus remove the need for compulsory attendance. Glasgow's decision to opt for a compulsory system, also discussed below, obviously directly addressed the problem of leakage as well. However, it also was directed more at raising levels of attendance and insuring a standard level of education pegged to completion of the Qualifying Exam.

An indelible element of the discussion over leakage was that of hooligans and loafers, and the closely associated issue of the destructive nature of "boy labour". John Ord, Superintendent of the Criminal Investigation Department of the Glasgow Police, outlined the situation when he addressed a meeting dealing with the wastage of the city's youth between the ages of 14 and 20 in 1910. He contended that all of the Parliamentary measures designed to improve "the condition of the working classes" and prevent "the continual augmentation of the criminal classes" had not, nor seldom ever did, live up to their expectations. This was particularly true in the case of the youth, both boys and girls. He quoted from police records that detailed the alarming

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[487]"Continuation Classes; The Immediate Future" Younie, J. EN May 22, 1914, p. 476.
[488]"Report on Continuation Classes, Southern Division, 1911" Jamieson, Reports & c. issued in 1911-12, p. 7.

number of cases of house breaking committed by children of "working people" between the ages of 8 and 16.[489]

By all accounts there was a problem in this area. Principal Laurie at Heriot-Watt College had even complained early on about "loose characters" annoying evening class students, and requested plain clothes officers be assigned to Heriot-Watt "with a view to remedying the situation."[490] In addition, The Children Act of 1908 highlighted the perceived close connection between school and the crimes of the young. Section 132 (22) required the Chief Constable to report to his local School Board the numbers of convictions of children each year, and the crimes committed.[491] These records do reflect a growing trend of youth crime. The number of such crimes reported to the Edinburgh School Board rose steadily from the 1903-04 session until the end of the period, from 375 in the former to 759 in the 1912-13 session. The vast majority of offenders were boys, and theft and malicious mischief by far the most convicted crimes; although "playing football on the street" also ranked high. Girls were convicted almost solely of theft. Table 6.1 shows the growth of such youth crime in Edinburgh.

Table 6.1: No. of Children Convicted in Edinburgh

Session	Boys	Girls	Total
1903-04	362	12	375
1904-05	456	19	475
1905-06	488	23	511
1906-07	487	14	501
1907-08	478	16	494
1908-09	465	16	481
1909-10	445	9	454
1910-11	538	10	548
1912-11	642	32	674
1912-13	740	19	759

(Sources: "Report of the 14th School Board of Edinburgh" 1914, p. 55)

However, all concerned did not feel that the solution was the extension of Continuation Classes. At attendance at the meeting in Glasgow was Henry Dyer. He postulated that too much attention had been paid to technical education and further education. While members of the working class should be fitted to become intelligent workmen, above all they should be given a good general education.[492]

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[489]"Teachers' Meeting: Glasgow--Wastage of Youth" EN Feb. 25, 1910, p. 204.

[490]Letter of Oct. 3, 1901. Laurie to Ross, R. (Chief Constable of Edinburgh), Letter Book No. 1, p. 864. HWC 3/1/10.

[491]"The Children Act, 1908" 8 Edward 7, Chapter 67. Reprinted in Graham, The Education (Scotland) Act, 1908, p. 127.

[492]Ibid.

Some progressive Boards, most notably Edinburgh, attempted to directly confront these issues, though such instances were rare. The Edinburgh Board not only provided special facilities for the instruction of unemployed or partly unemployed boys and girls, but also held conferences on the problem. At one of these conferences with a Sub-committee of the Scottish Committee on Women's Unemployment a scheme was drafted to open day Continuation Classes at the West Fountainbridge School in general, domestic, and commercial subjects. The classes were to be run in co-operation with the Juvenile Employment Bureau in an attempt to give students a lead in filling job vacancies. Solicitation went to not only parents, schools, and employers, but also to all the boys and girls on the Bureau's register of the unemployed.

Though the statistics are limited some can be related. The classes opened in December 1914 with an enrolment of 46 being taught in English, arithmetic, shorthand, type-writing, book-keeping, French, cookery, and dressmaking. By March of 1915 94 students had been in attendance at one time or another, but only 36 remained on the rolls, with an attendance rate of 87%. Though not a staggering success the Board was content with the effort; pointing out that youth unemployment had been particularly low in the city. In addition, there were other efforts including classes carried out in co-operation with the Edinburgh Sub-Committee on Women's Employment for women employed in the Relief Workrooms at Hope Park Square and Melville Street. Approximately 180 women attended courses in cookery, cutting-out, health, and sick-nursing. Classes were suspended at the end of April as most of the women had found work.[493]

The disappearance of the apprenticeship system, and the problem of young men leaving "boy labour" jobs with no prospects for future employment (discussed at length in Chapter 4) exacerbated the situation. During these years the solution was deemed to lie in the establishment of trade classes as a replacement to the old apprenticeship and to provide further training for those with no employable skills. The 1908 Act had made it the duty of the School Board to provide Continuation Classes that referred to the "crafts and industries" of the district.[494] In this regard Scotland took its cue from elsewhere. Tentative efforts were being made in English cities such as London and Leeds, while the progress made by such continental cities as Munich, Vienna, Berlin, and Paris was described as "striking." For example, Vienna had one of the largest trade schools in the world, with between 4000 and 5000 attending. In comparison, Scotland was just starting to develop such classes. Whole districts of

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[493]"Report of the Organiser, Session 1914-15" p. 4.
[494]"Education Act, 1908" Roxburgh, Law of Education, p. 57.

Scotland had no trade classes at all, and where they did exist their efforts were often hampered by teachers that had no knowledge of workshop practices. Employers in Scotland were once again perceived to be a main obstacle. In Glasgow "a comparatively trifling proposal" was met with considerable opposition on the part of employers, especially in the engineering trades.[495]

Yet during the years 1910 to 1914 trade and vocational classes did come to prominence and make genuine progress.[496] Some were more mundane such as the popular "Domestic Classes", which were attended by married women and those about to be married in order to learn the practical tasks that would make them good wives.[497] These included classes in Needlework, Cookery, Dressmaking, Millinery, and Household Management. Even in these classes efforts were made in cities such as Aberdeen to organise them so that after completion students were suited for a trade, as well as housekeeping requirements; though most classes would remain "recreative in nature."[498] However, most were trade and craft oriented. These included bakery and confectionery, tailoring, plumbing, moulding, cabinet-making and joinery, plaster-work, brass-finishing, and typing. As a complement to work or providing direct practical, rather than theoretical, training for a trade it was hoped that these classes would be more likely to gain the support of Scottish businessmen.[499]

As was true with most issues during this period, those local authorities which had previously taken a progressive posture to Continuation Classes did so with regards to this new area of classes. Edinburgh, typically, was very much in the lead. In 1912 the School Board opened a set of new, extensive workshops at Tynecastle School. Local authorities claimed that there was not in existence, at home or abroad, such an institution. It designed to serve as a "connecting link" between the day school and the workshop or factory; in other words, a real "apprenticeship school". It was seen as a big step in re-adjusting the conception of the meaning of "education", and meeting modern requirements.[500] The plan of the Tynecastle workshops for Continuation Class is found in Figure 6.1 on page 161.

While Edinburgh was rightfully proud of the Tynecastle workshops, the lofty claims were a bit unwarranted. Contemporaries pointed out that France and Germany had similar institutions, and that in most major German cities such as Munich it was

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[495]Day Continuation Schools and Classes" EN Jan. 24, 1913, pp. 75-76.

[496]Specific examples such as in Edinburgh are discussed and expanded upon below in the context of the issue of compulsion versus voluntary efforts.

[497]"Adult and Trade Classes: Practical Hints" EN Sep. 9, 1910, p. 862.

[498]"Education Institute of Scotland; Meeting in Edinburgh" EN Sep. 9, 1910, pp. 896 & 898.

[499]"Trade Schools and Workshops" EN Jan. 26, 1912, p. 68.

[500]"Trade Schools" EN Jan. 26, 1912, p. 67.

law that boys between the ages of 14 and 17 attend 9 hours of day classes per week. The critics concluded that Edinburgh could not "vie with the complete system already in existence in Munich, and the city should not rest content with one such school."[501]

Despite this criticism Edinburgh continued to cultivate its trade classes with a good degree of success, much of which was attributable to the Board's active involvement with local business which is discussed below. By the 1914-15 session it had opened at the West Fountainbridge School a fully equipped bakery that enrolled 72 bakers and confectioners, and a workshop for apprentice bootmakers which enrolled 35. It had added classes in Coach Trimming at Tynecastle School (11 enrolled) and Basket Work at Milton House School (30 enrolled). Permission had also been formally granted to form classes (should sufficient numbers present themselves) at the Tynecastle School in Art Metal Work, Trade Wood-carving, Upholstery Sewing, Trade Dressmaking, and Training of Children's Nurses. As well as other assorted classes including Golf Club Making and Art Needlework at various other centres. The Board also was considering suggestion for further new classes including "Classes for Motor Engineers and Motor Drivers", Classes for Waiters and Male Cooks, Advertising and Window-Dressing, as well as demonstrations in Ladies' Hairdressing.[502]

In addition, the Edinburgh Board set up Sectional Committees made up of representatives of employers and operatives, and generally one educational expert for trade and vocational topics. The Committees were divided into 25 different topics, all of which were purely vocational except for English, Commercial Subjects, Physical Exercise, and Engineering. Other topics included: Tailors' Work, Hairdressers' Work, French Polishing, Upholstery, Cabinetmaking, Carpentry and Joinery, Printing, Bookbinding, and Baking and Confectionery. Furthermore, permission had been given to form Bootmakers' Work and Trade Laundry Work Committees. These Committees reflected the extent and general approval of the vocational classes by the end of the period. Though this level of activity was far from universal throughout Scotland, it is clear that trade classes were extensive and a mainstay of the Continuation Class system in Edinburgh.[503]

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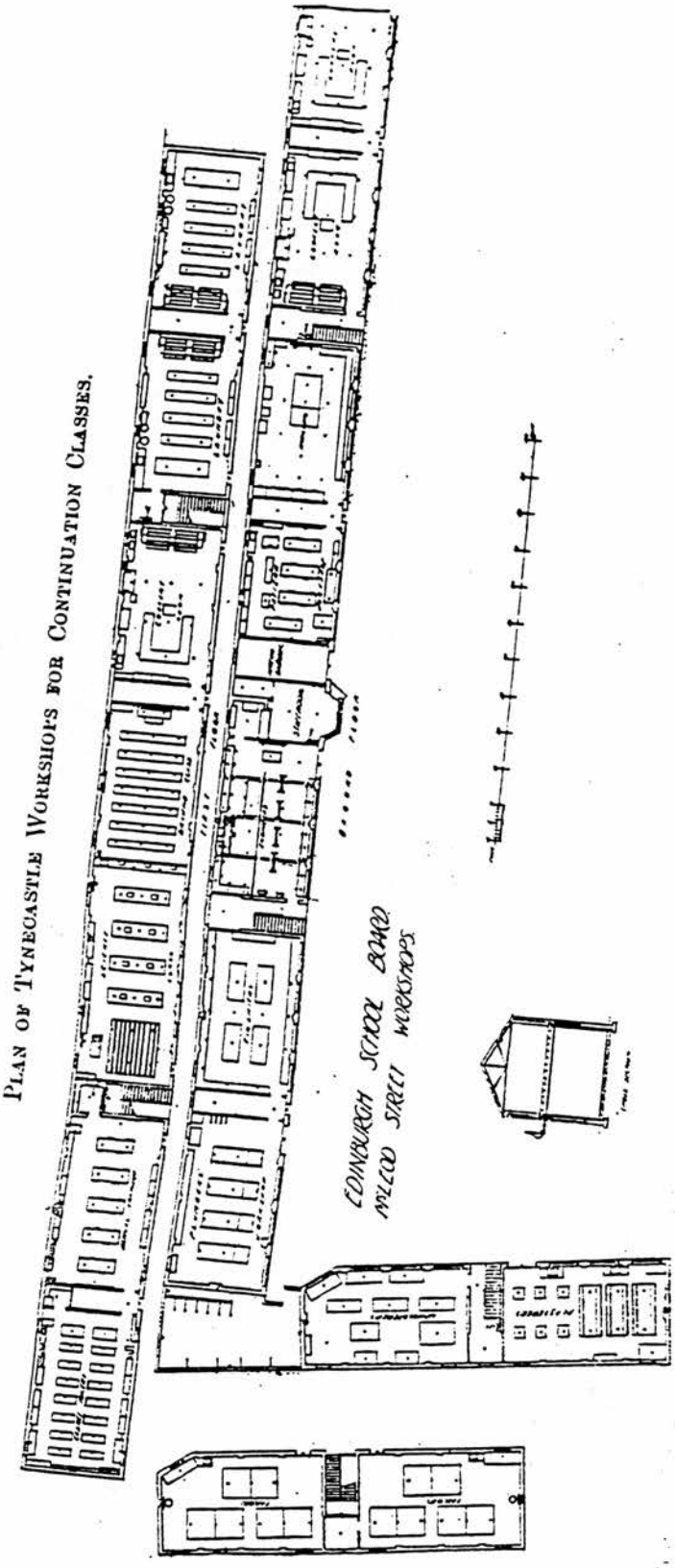
[501]Ibid. pp. 67-68.
[502]"Report of Organiser, Session 1914-15." pp. 3-4, 14-15, 19.
[503]"Reports by Sectional Committees of the Advisory Council on Visits to Continuation Classes, Session 1914-15" pp. 1-2.

Figure 6.1: Plan of Tynecastle Workshops for Continuation Classes



Glasgow also addressed the issue of trade classes though not with the success of Edinburgh. A Joint Committee of the GWSTC and the School Board drew up syllabuses as early as 1908 for classes in Patternmakers and Moulders, Machinists and Turners, Fitters and Millwrights, Electrical Instrument Makers, Carpenters and Joiners, and Masons and Builders. The classes were designed to give the students both a knowledge of the mechanical principles underlying the subjects, as well as instruction in practical experience. In total 27 classes were offered in Glasgow and Govan, but registration was so bad that only 6 were actually started, mostly Patternmakers and Moulders. In addition, attendance throughout the session was poorly maintained. However, local authorities persevered, and although they never reached the level of stability experienced in Edinburgh, trade classes by the end of the period were a fixture of the Glasgow Continuation Class system as well.[504]

All of these issues contributed to the long debate over making attendance at Continuation Classes compulsory. However, the problems of juvenile crime and boy labour may have had more of an impact than any other. This was true in both England and Scotland. For example, in 1911 the just introduced English Education Bill proposed to abolish half-time attendance in the day schools and give local education authorities power to compel attendance at a Continuation Class up to the age of 16. Directed at just these problems, the English Bill was following the lead of Scotland's Act of 1908 that gave the power to compel up to the age of 17.[505] It was a widely held perception that during the years of adolescence there was allowed "an immense process of manufacture of loafers and wastrels."[506] Compelling attendance at Continuation Classes was seen by those favouring it as an effective way of addressing this problem.

Yet during this time few local authorities seemed to favour compulsion. School Boards were exceedingly reluctant to move toward compulsion; preferring instead to exhaust all avenues available to them under a system of voluntary attendance. Most adhered to the old saw that a "volunteer is worth two pressed men".[507] Other commentators openly scorned the time when compulsion would "dump" upon the schools "the irreconcilables, the terrors, the lazy, the backward."[508] In addition, it was pointed out that to talk of compulsion in Scotland alone would poise a great injustice to the manufacturing community of the country. For example the

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[504]"Report on Continuation Classes, Western Division, 1908" HMI Andrew, Reports & c. issued in 1908-09. p. 29. See also, subsequent Western Division reports by Fraser.
[505]"This Week" EN June 2, 1911, p. 572.
[506]"Some Comments on the Continuation School Problem" Small, A. EN Sep. 1, 1911, p. 821.
[507]Ibid., p. 822.
[508]"Letter to the Editor, Continuation Classes" EN Jun. 2, 1911, p. 942.

cotton industry in the vicinity of Glasgow had much work supplied to them through Lancashire. Any shortening of hours or increase of expense in manufacture would handicap the Glasgow district. This was the same sentiment that was heard earlier with regards to putting businesses in cities that adopted compulsion at a disadvantage to other areas within Scotland. Therefore, some individuals concluded that compulsion could only be equitably put into practice if there was new legislation that affected all of Great Britain.[509] Regardless of the competitive disadvantage that compulsion might result in, employers generally opposed compulsion because of the "disruptive" effect it would have on their labour schedules. A survey made by the Glasgow education authorities indicated that about 80% of the large employers had the opinion that work would be dislocated if classes were made compulsory or held except in the evening.[510] The latter point is significant as it was widely held that compulsion was an impossibility until there was greater provision for continuation work in day classes; an area where there had been very little progress.[511]

What was pushing the continued debate over compulsion was the comparatively small proportion of pupils that entered any type of education after the day school. In 1912 differing authorities put the number ever attending a Continuation Class at 25% or 30% nationwide. Many, therefore, came to the conclusion that the voluntary system had largely failed to attain the desired end, and that only under a system of compulsory attendance could Continuation Classes attain a "satisfactory position in the education organisation of the country."[512]

The burdensome question was whether voluntary methods had secured as high a level of attendance as was possible without resorting to compulsion. If they had, then many felt compulsion was the only answer; "the ultimate complete solution" to bringing a larger proportion of young people under the influence of Continuation Classes. Those favouring compulsion would point out that it was those who would benefit the most from Continuation Classes that were not in attendance. Many commentators, as discussed earlier and with regards to physical training in Chapter 8, wanted to use compulsion at Continuation Classes to bring hooligans and loafers under some form of discipline and education, and as a preventative measure to the problem. However, the dread with which many authorities regarded this prospect encouraged a more mitigating approach.

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[509]Ibid.

[510]"Continuation Classes: The Curriculum" EN Mar. 20, 1912, p. 275.

[511]"Technical Education" Stewart, C. (Principal, Aberdeen Technical College) EN Apr. 15, 1910. See also, Dyer, Education and Industrial Training, pp. 56-57.

[512]"The Curriculum" EN Mar. 20, 1912, p. 275. For quote of 25% see "Continuation School Code: Some Problems" Meikle, D. C. T. (Portobello Higher Grade School), p. 498.

For this reason, most advocates of compulsion felt the first step was for School Boards to frame bye-laws to compel the attendance of "young people whose elementary education in the day school was left in such an incomplete and unsatisfactory condition" that they had not passed the qualifying examination. Seen as a compromise, a year at a Supplementary Course would exempt a student, or the Board could make the MC the standard for leaving the Day School. However, School Boards generally "turned their faces away" from even this minimum level of compulsion.[513] As a result, some believed that School Boards were slow to change because they were composed of employers of labour that would be most hurt if compulsion occurred. Thus, outside pressure from the SED would be required.[514] However, the 1908 Act had explicitly left up to just these School Boards to decide if compulsion was appropriate.

The two largest School Boards in the country split on the issue of compulsion. Edinburgh chose to employ innovative schemes to attract students to Continuation Classes, and exhaust all methods of raising enrolment within a voluntary system. Glasgow on the other hand opted for compulsion. Termed the 'Glasgow Experiment,' the Board introduced compulsion in 1911 for pupils who lacked a MC, or had not attended a Supplementary Course. In this manner the two most important School Boards in Scotland provided an interesting comparison in methods, results, and the problems accompanying each approach.

Edinburgh had for many years employed innovative techniques and progressive policies to raise the level of work and enrolment at the Continuation Classes of the city. Indeed, the city was often praised for using devices such as surveys of young people and return of fees, and in doing so providing an example that much could be done without compulsion.[515] Yet Edinburgh had considered, although quite briefly, the issued of compulsion. The Continuation Class Organiser added his voice to the debate in 1911. McNally estimated that there were 7000 young people, or 38% or the total population of 14 to 17 year olds, in Edinburgh that had never attended a Continuation Class. In addition, McNally considered these youth, which he termed "the dangerous fraction", to belong to the class most in need of "training in the duties of citizenship, physical well-being, and the technical principles of their daily occupations." He added that he did not believe that the progress Edinburgh had made would continue at the same rate, and that a compulsory system

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[513]"Continuation Classes and Compulsion" EN June 2, 1911, p. 572; "Education Institute" EN Sept. 9, 1910, p. 896.

[514]"Continuation Classes: The Curriculum" EN Mar. 20, 1912, p. 275.

[515]"The Forward Movement in Continuation School Education; an Important Letter by the Secretary for Scotland" EN. Apr. 8, 1910, p. 363.

"may be the logical and inevitable outcome of our present elementary school system." However, McNally warned against instituting compulsion before the system was ready to handle it. He explained that the city did not have, nor would have for many years to come, the machinery (teachers, buildings, equipment, etc.) necessary to accommodate compulsion.[516]

In the same year the Rev. Main put a motion before the Board that the powers given to it by Sect. 10 (3) of the 1908 Act be used to compel attendance of pupils who (a) leave the Day School without passing the Qualifying examination, and (b) for pupils who leave the Day School before completing a minimum of one year's instruction in a Supplementary Course.[517] The motion was soundly defeated at the first ordinary meeting of the Board at which it was discussed, losing 16-3.[518] After this defeat the subject was never seriously considered during the period leading up to World War I. The Edinburgh Board had resolved itself that the best way was to encourage voluntary attendance, and that if they did their job in terms of making the classes attractive, encouraging employer co-operation etc. then it would not be necessary to resort to compulsion.

One of the first steps the Edinburgh School Board made to ensure higher levels of attendance had occurred just after the passage of the 1908 Act when it appointed an Organizing Secretary for Continuation work (later known simply as the "Organiser") It was his duty to note the needs of pupils as well as those of workshops and offices, and to assist in "making the Continuation Class system of the city as complete and efficient as possible."[519]

Co-operation and communication with, and encouragement by employers was considered fundamental to a successful voluntary system by the Edinburgh School Board. Indeed, as early as 1911 the aggressive action of the Board had been so successful in raising employer interest that it was concluded that if it continued compulsion would be rendered unnecessary except possibly in the case of the unemployable. Of 91 employers to which direct appeals were made, only one presented any real difficulties to the Board.[520]

In turn, the Board itself had to be responsive to the needs of local employers. In 1911 the Board added additional classes at the request of the controller of the Edinburgh Telegraph Department to accommodate almost 200 Telegraph Messengers.

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[516]"Report by the Organiser of Continuation Classes, Session 1910-11" Minutes of the ESB. p. 572.
[517]"Continuation Classes" Minutes of the ESB. 1911, p. 545
[518]"Minute of Meeting" Nov. 20, 1911, Minutes of the ESB. p. 985.
[519]Ibid., p. 5. Report for 1908" Scougal
[520]"Report on Continuation Classes, Southern Division, 1911" HMI Jamieson, Reports, & c. issued in 1911-12. p. 7.

In turn, attendance at these once weekly classes was made mandatory for the messengers. When the Postmen's Federation requested the formation of a special class in English and French for Mail Sorters, the Board made arrangements for the twice weekly class.[521] Indeed, the extent to which the Edinburgh Board secured employer co-operation was seen as the outstanding feature of their system, and much of the credit went to McNally, the Continuation Class Organiser.

Another innovation was to go beyond meeting with the employers, and hold meetings directly with the workers. Such 'Worker's Meetings' had been used prior to the 1908 Act. However, the Board increased its effort in this area after its passage; increasing the number of meetings by over 100% between 1909 and 1911. The idea was to solicit the workers' opinions, criticisms, and suggestions for Continuation Class instruction. For those that did not attend they were often asked if any inducement would lead them to enrol. These meetings were considered a success and were done with the general blessing of the employers involved. For example, in 1911 the Board received permission to hold meetings on the work premises from an additional 20 employers, and in only two cases was permission refused.[522] The combination of visiting employers and conducting worker meetings had a profound effect on increasing enrolment within the voluntary system of Edinburgh. Table 6.2 shows the progress as it corresponded to these efforts.

Table 6.2: Growth of Enrolment and Overtures to Employers.

Session	Visits	Meetings of Workers	Enrolment
1905-06	0	0	3772
1906-07	350	2	4516
1907-08	495	30	6477
1908-09	542	56	7621
1909-10	571	81	8789
1910-11	808	91	10,099
1911-12	980	125	10,755
1912-13	806	159	10,391
1913-14	785	167	10,898
1914-15	654	146	10,931

(Source: "Report of Organiser 1914-15", p. 8.)

The most important factor, however, was encouraging the employer to take an active role in persuading his charges to attend. In Edinburgh with the encouragement of the Board employers used a variety of methods. These included: offering special awards such as books, etc. to employees who regularly attended; payment of extra wages for certain levels of attainment; giving opportunities for promotion to those who obtained special qualifications at the Classes; granting exemptions from overtime or

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[521]"Report of Committee on Cont. Classes, Sep. 28, 1911" Minutes of the ESB. p. 819, 825. See also, "Continuation Class Work in Edinburgh" EN Sep. 15, 1911, p. 936.

[522]"Report of Organiser, 1911" Minutes of ESB. p. 574.

giving facilities to attend classes during work hours; and expressing clearly their desire that all apprentices and learners attend classes relating to their occupation.[523] By far the most common, however, was the guarantee of fees if classes were completed satisfactorily. With the active involvement of the Board the number of business guaranteeing fees and the number of students taking advantage grew steadily over the years. Table 6.3 shows this growth.

Table 6.3: Growth in Number of Fee Guarantees.

Session	No. of Guarantors	No. of Guarantied Students
1906-07	11	427
1907-08	20	760
1908-09	32	902
1909-10	62	1020
1910-11	101	1155
1911-12	124	1534
1912-13	145	1674
1913-14	164	1695
1914-15	168	1638

(Source: "Organiser's Report 1914-15" p. 9.)

Much like the Board scheme of returning fees, the practice of guaranteeing of fees had positive effects above and beyond promoting attendance. Students whose employers had guarantied fees and encouraged attendance performed well in the classes, and were likely to complete the full session. Table 6.4 shows the exemplary performance of these students in two separate years.

Table 6.4: Success of Students with Employer Backing.

	1911	1914
No. whose fees were guarantied	1155	1695
No. who completed the session	1108	1538
No. who made perfect attendance	425	418
No. who earned Return of Fee	983	1463
No. who gained Class Certificates	935	1374
No. who gained prizes for Attendance/Merit	538	703

(Source: "Report of Committee on Continuation Classes, Minutes. 1911, p. 664; 1914, p. 650.)

The Edinburgh School Board remained active in its courting of employers through to the end of the period, and throughout the value of having an 'Organiser' proved itself. At the end of the period an Advisory Committee of employers and workmen in the motor industry was being formed. The Committee was to ascertain the educational facilities required for motor workers, drivers, motor engineers, and motor body builders. In addition, there was made an overture to leading hotel and restaurant keepers to determine the need and scope for a course of training for apprentice waiters and chefs. Furthermore, the Commercial Advisory Committee were busy making consultations regarding the necessity for trade classes in advertising and

[523]"Report of Organiser, 1911" Minutes of ESB. p. 575-76.

window-dressing. The continued activity in the area of employer co-operation and enthusiasm for training schemes, reflected not only the previous success the Board had with regards to rising enrolment but also a slow appreciation of Continuation Classes by businessmen in the city.[524]

Closely associated with this was the success of Edinburgh's Employment Bureau. Under Section 3(5) of the 1908 Act School Boards were to set up such bureaux to aid students in the transition to the work place. Edinburgh's was particularly successful due in part to a system of co-operation established with the Board of Labour Exchange. A permanent official of the Trade Labour Exchange had an office on the premises of the School Board. In addition, the whole Juvenile Department was transferred from the Labour Exchange to the Board Office. Other techniques were also used such as the giving of a leaflet entitled "Thoughts for a Boy or Girl on choosing Work" to each child.[525] Table 6.5 shows the number of students placed in jobs through the bureau, with a decline in 1914 and 1915 attributed to the beginning of the War.

Table 6.5 Number Placed in Occupations Through the Bureau

1912	1,280
1913	1,411
1914	1,044
1915	963

(Source: "Report of the Proceedings of the 14th School Board for the City, 1911-14" March 1914.)

In Edinburgh the Bureau served the dual purpose of making participation in Continuation Classes more attractive, and as a further mechanism of employer involvement in the system. For example, during the year ending in April 1915 there were 2,126 applications by pupils to the Bureau, 1461 vacancies for learners or apprentices posted by employers, and 1642 applicants for advice regarding education and employment. Fully utilised by employers and students alike the Employment Bureau was another successful device the Edinburgh School Board used to encourage voluntary attendance.[526]

As discussed above through Section 10(1) of the 1908 Act the SED had put a positive duty on School Boards to make provision for Continuation Classes for the further instruction of youth above the age of 14 with reference to the crafts and industries practised in the district. Edinburgh was one of the centres that took this duty seriously. In addition to the benefits the classes were deemed to have in relation to replacing apprenticeships, etc., the Edinburgh Board found them to be a further tool

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[524]"Report by Organiser, Session 1914-15" p. 20.
[525]Report on Continuation Classes, Southern Division, 1911" Jamieson, p. 7-8.
[526]"Report by Organiser, Session 1914-15" p. 6. See also, "Report of the Proceedings of the 14th School Board of the City, 1911-14" pp. 21 & 37.

to raising levels of enrolment in their voluntary system. Figure 6.2 lists the various classes that Edinburgh had introduced down to the 1914-15 session.

Figure 6.2: Trade and Vocational Classes in Edinburgh

Engineering and Metal Trades
Engineering
Physics
Brassfinishers' Work
Tinsmiths' Work
Moulders Work

Building Trades
Building
Carpentry and Joinery
Plumbers' Work
Plasterer's Work

Furnishing Trades
Cabinet making
Upholstery
French Polishing
Coach-Trimming

Printing Trades
Compositors' Work
Machinemen's Work
Letterpress Binding
Stationary Binding

Baking Trades
Bread baking
Confectionery

Dress Trades
Tailors' Work
Tailoresses' Work
Design for Dressmakers
Boot makers' Work
Hairdressers' Work

Miscellaneous
Motor-body Building
Clay Modelling
Basket Work

Commercial Occupations
Shorthand & Typewriting
Book-Keeping & Commerce
Modern Langs. & Commerce
Shop Management

(Source: "Report by the Continuation Classes Committee on the Continuation Classes for Winter Session 1914-15, and Summer Session 1914.")

Edinburgh also made efforts to provide adequate accommodation for these classes. In addition to the well-equipped Tynecastle Supplementary School which provided practical work in 16 trades, there was Fountainbridge that covered baking, confectionery, and boot-making; Milton House School which had full facilities for apprentice bookbinders; and a series of temporary workshops connected with St. Leonard's School. The latter was considered to be a temporary expedients, until the Board had an opportunity to build "the workshops which the industries of the respective districts appear to require."[527]

Many of the complaints common to the rest of the system were made about these classes. These included that the pupils were not motivated enough or too tired, they had a fault in their elementary education, the teacher did not have enough practical/theoretical training, numbers were small, standards were low, etc. However,

[527]"Report by the Continuation Classes Committee on the Continuation Classes, Winter Session 1914-15, Summer Session 1914." p. 15.

the general tone with regards to these classes was better than for others. Students, teachers, and work were, with exceptions, considered to be satisfactory.

The one issue which strained the system of trade classes was the provision of day classes. Indeed, Edinburgh found tackling this issue with regards to the whole system of Continuation Classes as one of the last major hurdles to cross. Edinburgh had found that one of the keys to the success of the classes for the unemployed was placing them on a day basis. It was believed particularly true with regards to girls. It was felt that even in normal years day classes such commercial ones would be well attended by girls. In part this stemmed from the experience with the series of classes carried out in co-operation with the Edinburgh Sub-Committee on Women's Employment.[528] Day classes also proved successful when coupled with direct co-operation from a business. For example, during the 1914 summer session the Board gave afternoon classes in cookery and physical training to 40 girls employed by Messrs. M'Vitie & Price, St. Andrew Biscuit Works, which "proved successful in every respect."[529]

Possibly because of these successes in January 1913 Edinburgh expressed its intention to formulate a strategy for implementing a full scheme of day Continuation Classes. It was also inspired by the comprehensive arrangements in German towns, and the approval of a report on the Training of Apprentices by a Joint Committee of Representatives of Educational Bodies in the city. It was a bold move that met with general approval, but that would difficult to implement and finally fail to come to fruition.[530]

In preparation for such a scheme the Board formed a Committee convened by the Rev. Main to go to England and collect information on the day classes there. They visited Sunderland, Northampton, Middlesborough, York, Leeds, Bradford, Halifax, Sheffield, Norwich, Leicester, Birmingham, Manchester, Liverpool, Barrow-in Furness, and London. Based upon the experience of educational authorities and employers who had tried the system in such towns as Birmingham, Liverpool, Manchester, and York the Committee was convinced of the feasibility of day Continuation Classes. The co-operation of employers was of course essential, but those interviewed seemed to have appreciated the effect the day classes had on their apprentices, though it had often built up over time. For example, in Liverpool the

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[528]"Report by Organiser, Session 1914-15" p. 4.
[529]Ibid. See also, "Report of Committee on Continuation Classes" Feb. 18, 1914 Minutes. p. 143.
[530]"Report of Meeting of Board in Committee" Feb. 17, 1913; "Report of Committee on Continuation Classes" Oct. 22, 1913, Minutes. pp. 179 & 946; See also, "Day Continuation Classes" Mar. 21, 1913, EN p. 247; "Report on the Question of Day Trade Continuation Classes" Main, W. (1914).

experience was one of very gradual acceptance, as word of mouth spread the good effects classes were having on the apprentices of other businesses. Most of the participating employers there let their apprentices away only one day or part of one day a week. For example, the Liverpool United Gas Company released their apprentices from 1 p.m. each Monday, and Bibby & Sons, Seed Crushers, did the same. Both guarantied fees and did not deduct from wages.[531]

Transferring these plans to Edinburgh did raise problems, though none that made it impossible in the minds of those writing the report. For example, as Edinburgh firms were generally much smaller the removal of a proportion of apprentices at certain times was more inconvenient. But it was equally recognised that the existing voluntary system could not be improved without some "limitation of the hours of labour of young persons." In England the experience was that where employers had insisted on their apprentices taking classes the number of working hours per week had not exceeded 48. The Committee felt it was appropriate to warn employers in Edinburgh that it was in their interest to work with the voluntary system, "and so obviate the necessity for further legislation."[532]

Yet the main obstacles to implementing such a scheme in Edinburgh were not employers, as the Board had success working with them, but rather the provision of adequate accommodation, a supply of fully qualified teaching staff, and possible increased expenditure. Accommodation was one of the principal problems. Edinburgh had 20 workshops at Tynecastle, 4 at St. Leonards, 4 at Milton House, and 3 at Fountainbridge. Though sufficient for the current needs of the city; to accommodate a full day Continuation Class system and suit the convenience of employers in the northern, eastern, and southern districts, ranges of workshops similar to those at Tynecastle would have to have been erected at Bellevue and in the south side. For commercial classes it would have been necessary to rent premises or to acquire a building in a central location. Another option was to have the employer provide accommodation inside their works, which was common in England.

A further difficulty was the lack of appropriate day classes at the Central Institutions to follow on from the Continuation Classes. The Royal Technical College at Glasgow (previously GWSTC) had some day students, but no apprentices in the 'usual' sense. Some apprentices were in the Engineering Department under the "sandwich" system of winter in college, summer at work. Other than these students there were only the 12 students in the bakery school, and some in day classes for painters which met three months a year. In Edinburgh Heriot-Watt had no day classes

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[531]"Report on Question" Main, pp. 14 & 18.
[532]Ibid., pp. 18-19.

for apprentices in the usual sense. Rather, day students at Heriot-Watt were generally taking a 3 years' course leading up to the Diploma of the College in Engineering, Mining, or Chemistry, or the the University B.Sc. degree in Engineering. There were also some "sandwich" students as well, but none of the day students were attending classes for only a few hours per week concurrent with practical training in a workshop.[533]

In the end the combination of these problems would result in Edinburgh failing to implement any comprehensive scheme for day Continuation Classes. Yet, the very fact that continuation education had reached the stage that a School Board, be it a traditionally progressive one, contemplated such a move is evidence of the growth and increased acceptance the field had experienced in the years since the 1908 Act.

Although Edinburgh was the most active and inventive authority, other educational authorities embraced progressive methods to increase attendance within a voluntary scheme. In Govan the basic precept was to more effectively bring the existence of and the opportunities available in Continuation Classes to pupils who otherwise might not have taken notice on their own. Special officers delivered cards to the homes of all pupils who were about to leave or had left the Day School. These cards, in addition to impressing on the parents the importance of sending their children to the Continuation Classes, indicated the centre and classes in which they should enrol. The card was handed in upon enrolment, and its the non-appearance indicated that the pupil has not enrolled. When this occurred a further effort at persuasion was often made.[534]

Several local authorities followed Edinburgh's example of appointing an 'Organiser' for their Continuation Classes. In Dumbarton the Organiser was seen as fundamental to a rise in enrolment from 838 during the 1911-12 session, to 981 in 1912-13, and 1,044 in 1913-14. Such success resulted in an estimate that all but 27% of the students leaving day school were accounted for in some Continuation Class.[535] In 1911 an Organising Secretary was also appointed for the County Councils of Midlothian and Linlithgow, as well as by the Old Kilpatrick (Clydebank) School Board. Leith followed in 1913. In all cases the Organiser had a positive effect on attendance and the efficiency of work, especially in appeals to local businesses for co-operation.[536]

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[533]Ibid., pp. 17-19.
[534]"Report on Continuation Classes, Western Division, 1913" Fraser, Reports & c. issued in 1912-12, p. 32.
[535]Ibid.
[536]"Report on Continuation Classes, Southern Division, 1911" Jamieson, p. 10; "Report on Continuation Classes, Western Division, 1911" Fraser, p. 38; "Report on Continuation Classes, 1913" Jamieson. p. 15.

Though they had opted for a drastically different approach from Edinburgh, those School Boards that adopted a policy of compulsory attendance were also evidence of a rising acceptance of the importance of Continuation Classes. Those adopting compulsion were a distinct minority, with most Boards either reluctant to take the step or too disinterested generally.

For those Boards following this course, compulsion was driven directly by the vast numbers who were not being reached by Continuation Classes throughout the country. In Dunfermline only 28% of youth between the ages of 14 and 17 were in attendance. In Kirkcaldy the figure was better at 40%.[537] The situation was much the same in the West of the country. H.M.I. Macdonald reported that in Renfrew and Argyll the figure stood at 25% in 1911. He added his doubts that levels could be raised without compulsion: "Whether we shall get much nearer the end of our journey without compulsion I am pessimist enough to doubt."[538] In addition, there was the persistent belief that those that remained outside the system were those who would be most helped by participation.

Boards adopting compulsory bye-laws at the same time as Glasgow included Hoddam, Lockerbie, Moffat, East Kilbride, and Lochmaben. The Boards of Dumfries, Castle Douglas and Annan had the policy under consideration. The general condition of compulsion was failure to reach the level of the Qualifying examination, although some Boards experimented with the idea of compulsory classes for the unemployed as well. In the case of these relatively smaller Boards the results appear to have been generally good. It was reported that compulsion had worked with "almost perfect smoothness," and that "the gloomy forebodings of disciplinary trouble" had been bellied. Yet only East Kilbride was successful in bringing in all the students to which compulsion applied, and other Boards found the greatest problem to be enforcing attendance.[539]

By 1913 seven additional Boards in Dumfrieshire had adopted compulsory powers, while in whole areas such as the Borders the matter was never even considered. The new Boards experienced many of the same difficulties as before, but by this time Lockerbie had become something of a model for the smaller Boards A 1913 census revealed that there were only 66 adolescents between 14 and 16 not in some type of further instruction. Compulsion had successfully assured attendance of

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[537]"Report on Continuation Classes, 1911" Jamieson, Reports & c. Issued in 1911-12. p. 13.
[538]"Report on Continuation Classes, Western Division, 1911" HMI Fraser, Reports & c. Issued in 1911-12. pp. 24-25.
[539]Ibid., pp. 28-29. See also, "CCES Report for 1910-11" PP 1911 XXI, p. 22.

the others, with a few at Supplementary Classes, the rest in evening Continuation Classes, and an average attendance of 76%.[540]

Most of the large School Boards did not go the route of compulsion. It was said that they actively reflected upon the "great advantages and simplification" that would follow compulsion, but shrank "from taking the plunge." Glasgow was the only big, and the most important Board to take the plunge when it adopted the following bye-law for compulsion at the city's Continuation Classes:[541]

> 'II. Every young person shall be bound, when so required to satisfy the Board (a) that he has obtained, or is at the time of demand qualified as regards educational attainment to obtain, the Merit Certificate; or (b) that, prior to so satisfying the Board, he has been for two years in a Supplementary Course; or (c) that, by reason of ill-health, or other special circumstances, he ought to be exempted from the operation of these bye-laws. Every young person who satisfies the Board in terms of this section shall receive from the Board a certificate of exemption from the operation of these bye-laws. III. Every young person who has not satisfied the Board in terms of Section II. shall be bound to attend a Continuation Class (a) for such a number of attendances as, together with any attendances he may have given in a Supplementary Course, will make a total equivalent to two years in a Supplementary Course; or (b) until the Board shall exempt him from further attendance; or (c) until he ceases to be a young person.'

Not unexpectedly, this measure met with opposition from both employers and students. Employers opposed the measure as it disrupted work patterns and reduced the number of hours available for labour. Furthermore, as Glasgow was one of only a very few boards in the country to enact the measure, it put Glaswegian employers at a comparative disadvantage to areas without compulsion. Also, as attendance was made compulsory in addition to any work, rather in place of it, the numbers of hours worked often violated the Factory Acts. Yet, employers did not feel that it should be incumbent upon them to cut working hours. Finally, the Act's enforcement power was directed at employers rather than the actual students. As a result they felt penalized for the actions of their charges. The adolescents resisted on more tradition grounds: they didn't want to go to school, especially while their time was also taxed with work. As a result they presented much the same educational and discipline problem as the previously discussed exempted pupil.[542]

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[540]"Report on Continuation Classes, Western Division, 1913" HMI Fraser, Reports & c. issued in 1912-13, p. 37.

[541]"Report on Continuation Classes, 1911" Fraser, p. 29.

[542]See generally, "CCES Report for 1910-11." pp. 30-35. EN Dec. 15, 1911, pp. 1253-4; Sept. 6, 1912, p. 770; Oct. 31, 1913, p. 1016.

Glasgow also faced problems forewarned by Edinburgh's study of compulsion. The Board had not made provisions for adequate accommodation or staffing. The increase in Division I attendance was much larger than anticipated, and was far beyond the ability of the teaching staff to handle efficiently. In addition, attendance was generally bad, with up to 50% of pupils missing after a short time in one centre. The vast numbers missing classes led to erratic enforcement, and attendance was frequently disregarded altogether once students became aware that no serious consequences would follow.[543]

It was accommodation, however, that poised the greatest problem for the city, especially as they had for too long relied on space at day schools for continuation work. Other rooms quickly pressed into service were ones that would never have otherwise been used. They were small, poorly equipped, and at times so poorly ventilated and lit that students were described as "listless." New classes were formed at irregular intervals, and classification of students proved almost impossible as they often arrived and left without notice and in a disruptive manner. Though fixed dates had been set for leaving, exempts rarely waited once they reached 14 years of age. Regularity of attendance of what became know as "Bye-Law pupils" was also erratic and unsatisfactory ranging from 60% to 80%. It was concluded in 1913 that for a system of compulsory attendance to work efficiently entire schools would have to be formed for nothing other than Division I work, and preferably to segregate those that attended only because of the bye-law.[544]

Despite the obvious problems commentators insisted the system could work. However, it would be necessary to place the entire system on a day class basis as had been done in Munich. Those with a more realistic perspective commented: "what is feasible in Bavaria may well prove either difficult or even impossible in this country." If there had been any doubt, the reality was made clear when the School Board met with representatives of the shipbuilding and engineering industries of the Clyde. The latter stated that any proposals which necessitated day school attendance on the part of apprentices would be vehemently opposed as it would completely dislocate the 'squad system' of working, and inevitably throw men out of work.[545]

By the end of the period Glasgow authorities had not been persuaded by all the difficulties to reject compulsion. However, they severely moderated the conditions of

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[543]"Report on Continuation Classes, Western Division, 1912" HMI Fraser, Reports & c. Issued in 1912-13. pp. 29-30.
[544]"Report on Continuation Classes, Western Division, 1913" HMI Fraser, Reports & c. Issued in 1912-13. pp. 36-39.
[545]"The Next Great Step in Education" EN Sep. 6, 1912, pp. 769-70.

attendance, requiring a significantly shorter period of time. It was with "reluctance and regret" that the Board introduced the following modification in 1914:[546]

> every child who has not been in a Supplementary Course shall be exempted after 60 attendances in the Bye-Law Classes, and that every child who has attended for any time in the Supplementary Course with fair regularity shall have a proportionate deduction made from the above number of 60 attendances.

Glasgow's experiment can not be considered a true failure, but it certainly had less than expected results. Early on one commentator said that Boards often looked on the "great advantages and simplification" that would accompany compulsion, but shrank from taking the plunge. Glasgow had taken the plunge and found that compulsion, while it might ultimately have advantages, did not simplify anything; possibly much the opposite. It also seemed certain that Glasgow had not anticipated the numbers that would come into the system with the advent of compulsion. Without adequate staff, accommodation, or enforcement Glasgow could not ensure the level of education Edinburgh could through voluntary means.

Part IV: Other Developments

Though the 1908 Act represented a break from the past with regards to Continuation Classes, there were three significant reforms from the pre-Act period which continued apace after its passage. These were developments in attendance in the various divisions, organisation of school facilities, and co-ordination between the Continuation Classes of School Boards and the Central Institutions.[547]

Along with the gratifying general increases in nationwide enrolment during this period there was a slow, but steady increase in the number centres offering Division III courses and enrolment in this highest level of work. Much of this may have been due to the new "preparatory year," but separate statistics were not kept. By 1911 in the Western Division only the 3 counties of Bute, Kirkcudbright, and Wigtown had no classes in Division III (others being Argyll, Ayr, Dumbarton, Dumfries, Lanark, Glasgow, Govan, Renfrew). In many cases those that previously had Division III witnessed additional growth in the number of schools. For example, Lanark went from 18 schools with Division III classes in the 1909-10 session to 28 in 1910-11. In Ayr it went from 23 to 30, and in the Western Division there was an overall increase from 94 to 129. However, some were more successful than others. In Argyll courses existed only at Dunoon and Oban, neither was considered much of a success. In

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[546]"Report on Continuation Classes, Western Division, 1914" HMI Fraser, Reports & c. issued in 1914-15, p. 28.

[547]Co-ordination and co-operation with the Central Institutions is also discussed in Chapter 7.

contrast, the manufacturing community in Ayr was well served, and the work received a high degree of praise. It was considered that the mining classes could not have gotten much better. [548]

Growth in Division III courses resulted in a steady reduction in the number of Division II classes. It was noted that if all the pupils who left the Day School at the age of 14 were at once enrolled in Continuation Classes, as they very largely already did at important centres like Edinburgh, Leith, and Kirkcaldy, no great harm would have been done if Division II was omitted entirely from the Code. However, it was admitted there was a long way to go to reach that state of advancement. Thus, leakage again impeded reaching the ideal the SED hoped for.[549]

Despite the hope in 1901 that Division I courses would only be a temporary feature of the system, their existence persisted through to the end of the period. Renfrew and Argyll had a comparatively large number of Division I students. This was attributed to pupils continuing to leave the elementary schools without having spent a year in a Supplementary Course, or without having passed the Qualifying Examination. Others attributed their continued existence on the large number of students that did not engage in a long course of study, preferring to take one or two separate classes. The enduring problem of leakage was again seen as a contributing factor, as students often had to start at a very basic level after a year or more away from school.[550]

In addition, the Division I student remained far behind the basic level of instruction. In Renfrew and Argyll it was noted that the Division I pupil was more easily educated "through the hand than through the head." In Ayr a general effort was made to bring Division I classes into line with the curriculum of the Supplementary Classes, but the standard was found to be too high. And even in Glasgow where an advance was noted in the quality of work it had not yet reached the level of a Supplementary Courses.[551] However, the general trend during the period was a steady decrease in the number of Division I courses, a most satisfactory result in the opinion of the SED. Table 6.6 shows the growth in courses and the distribution of enrolment by Division.[552]

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[548]"Report on Continuation Classes, 1911" Fraser, pp. 22 & 35.
[549]"Report on Continuation Classes, Southern Division, 1914" HMI Jamieson, Reports & c. issued in 1914-15, p. 3.
[550]"Report on Continuation Classes, 1913" Jamieson, p. 3.
[551]Ibid, pp. 31-33.
[552]Table starts with the first year reported after the new Code in 1901. Listing after 1909 include enrolment in Preparatory Year in Division III statistics. Source: 1902-03 to 1911-12 from Reports, Statistics, & c. Relating to Continuation Classes and Central Institutions, 1910-11 & 1911-12, p. 159. From 1912-13 to 1914-15 from Reports, & c., 1913-14 & 1914-15, p. 127.

Table 6.6: Continuation Class Statistics to 1914-15 Session

Session	#of CC Authorities	# of CC Centres	Div. I	Number of Continuation Classes In Div.II	Div.III	Div.IV
1902-3	367	736	447	585	56	93
1903-4	359	734	437	600	60	121
1904-5	357	761	441	644	75	116
1905-6	365	748	405	634	96	115
1906-7	367	768	390	641	97	121
1907-8	347	757	379	636	113	132
1908-9	341	755	376	631	122	177
1909-10	550	1,055	638	768	157	210
1910-11	593	1,119	641	862	227	196
1911-12	591	1,126	598	915	294	211
1912-13	567	1,059	513	911	330	210
1913-14	635	1,178	497	1,026	368	201
1914-15	571	1,072	426	959	358	160

	Number of Individuals In: Div. I	Div.II	Div.III	Div.IV	Total
1902-3	21,920	59,067	4,620	5,079	81,681
1903-4	23,395	59,915	4,189	5,460	85,011
1904-5	24,072	63,414	5,120	4,919	90,383
1905-6	21,085	66,481	7,860	4,730	95,688
1906-7	20,109	70,471	8,831	5,631	100,586
1907-8	18,063	73,012	8,934	6,612	101,664
1908-9	18,198	77,825	9,731	10,422	108,813
1909-10	25,821	76,967	22,653	9,902	127,687
1910-11	25,465	82,991	27,041	8,723	137,180
1911-12	27,125	85,524	29,703	8,946	144,815
1912-13	28,069	80,431	33,156	8,094	143,942
1913-14	29,369	81,380	37,645	7,829	151,855
1914-15	Figures Not Available				

If one single area of education prospered during this period of growth in Continuation Classes it was not technical education, but rather commercial studies. While this was not the original policy of the SED there was reason to conclude that this was the natural sphere for commercial education to thrive, and the progress it made was substantial. Detailed national statistics of individual classes taken were not available, but Inspectors reported that commercial subjects enjoyed a popularity in the Continuation Classes that they had not elsewhere. In 1908, H.M.I. George noted that commercial arithmetic and shorthand were always popular courses. H.M.I. Harvey commented that in Govan and Dumbarton book-keeping, shorthand, and type-writing were very popular. Furthermore, while the taking of single subjects was more common, some centres had established commercial courses at the highest level of the Continuation Class system. In Barrhead, Greenock, Paisley, and Dumfries a full course existed. Poignantly, an attempt was made to formulate a uniform commercial course in Glasgow, but it failed owing to students merely taking a single subject, or perhaps two allied subjects such as shorthand and book-keeping. But these single

subjects were nonetheless well attended, with approximately 3,000 enrolled in shorthand, and 2,000 in book-keeping.[553]

In 1911 a conference was held with representatives of various School Boards and the Organising Secretary from the Glasgow Anthenæum Commercial College with the view to tying the more advanced commercial Continuation Class work into the instruction of the College, and generally encourage such classes. As a result six new centres established advanced commercial classes including ones in Renfrew and Argyll. In addition, a single scheme of instruction was instituted for Gourock and Greenock, Thornliebank and Pollokshaws were linked to Shawlands Academy, and Grahamston School at Barrhead began to receive students from the other schools in Neilston Parish.

H.M.I. of Science and Art Young spoke of the "phenomenal progress" made in courses of a commercial character and in their affiliation with the work of Central Institutions in the West. He concluded that it seemed "to be in obedience to some uninvestigated law that a nebulous desire for self-improvement in the evenings should almost invariably condense into a demand for Shorthand and Book-keeping." Indeed, of the major Boards only Paisley was deemed to be deficient in commercial Continuation Classes.[554]

By 1914 even Paisley had put commercial Continuation Courses on a more solid footing. The glaring deficiency in the West was also the largest and most important commercial centre: Glasgow. Despite the early efforts of Jacks and the Chamber, the normally active School Board lagged behind its less significant contemporaries. For example, it had no classes at the highest level of Division III. Furthermore, in 1913 the Board had indicated that it would arrange classes for those wishing to go on to the Anthenæum Commercial College, but the number of students presenting themselves was so insignificant that the classes could not be formed.[555]

In the South as well commercial studies prospered at the Continuation Class level. The Boroughmuir Commercial Institute of the Edinburgh School Boards was one of the very few institutions given over completely to commercial studies. While it provided the most advanced instruction, it was basically in the same subjects as any number of School Board classes. i.e. shorthand, book-keeping, and type-writing. During the 1913-14 session the always progressive Edinburgh Board established a co-

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[553]"Report on Continuation Classes, Western Division, 1908" HMI Andrew, Reports & c. issued in 1908-09, pp. 16, 20, & 23; "Report on Continuation Classes, Western Division, 1911" HMI Fraser, Reports & c. issued in 1911-12. p. 40.

[554]Ibid., "Report of 1911" p. 21.

[555]"Report on Continuation Classes, Western Division, 1914" Fraser, Reports & c., issued in 1914-15. p. 39.

ordinated system of alternative courses in commercial subjects under Division III. Initial difficulties were successfully overcome, and the courses ended up operating at 22 city centres. Of these, the Commercial Institute operated out of the Royal High School was the largest in Scotland.[556]

The courses were in shorthand, type-writing, and two alternative course in book-keeping and modern language. The shorthand and typing course both included English, arithmetic, and shorthand in the first two stages, then specialised in the third. For the latter two attendance at the Heriot-Watt College was required in the third year. In this way the various centres under Board control were closely linked to the Central Institution. Furthermore, the issue of certificates had landed back within the authority of the School Board with the failure of the SED Commercial LC. The Edinburgh Board awarded a "Junior Commercial" Certificate for the three year course, and a "Senior Certificate" for a longer commitment.

The Edinburgh Board also employed a variety of innovative methods to encourage attendance.[557] The fee of 5s was returned to all who achieved 80% attendance, with the result that attendance normally averaged 90%. In addition, free books and stationary were supplied by the Board, and at the end of the session the student could keep any textbook by paying 1/3 of the cover price. This concession, designed to encourage students to continue their studies between sessions, was "much taken advantage of." Furthermore, a variety of prizes such as the "much-coveted" Shorthand Certificate acted as powerful factors in stimulating the pupils to "steady and useful endeavour."[558]

The great obstacle that Edinburgh's commercial courses experienced was common to the whole system. Students rarely stayed on for the full course, preferring to take only one year or only a few subjects.[559] For example during the 1912-13 session a census of four city centres showed 233 enrolled in the first year, with only 156 qualifying for the second year. Of those qualified, only 36 continued for a second year. This represented only 15% of the original enrolment. During the 1913-4 session 96 students qualified for the second year of the course, and only 22 enrolled. In this regard it was interesting to note that of over 140 students who entered for the Joint Course Certificate Examination in Shorthand and Typewriting, only 31 qualified for certificates. In the words of the assessors, the "failure of the great majority of the

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[556]"Report on Continuation Classes, Southern Division, 1914" Jamieson, Reports & c., issued in 1914-15, p. 6.

[557]These are discussed in greater detail as applied to the whole System of Continuation Classes in Chapter 5 & 6.

[558]"Continuation School and Classes; How to Make Them Successful" Bowie, EN Sep. 9, 1910, p. 862.

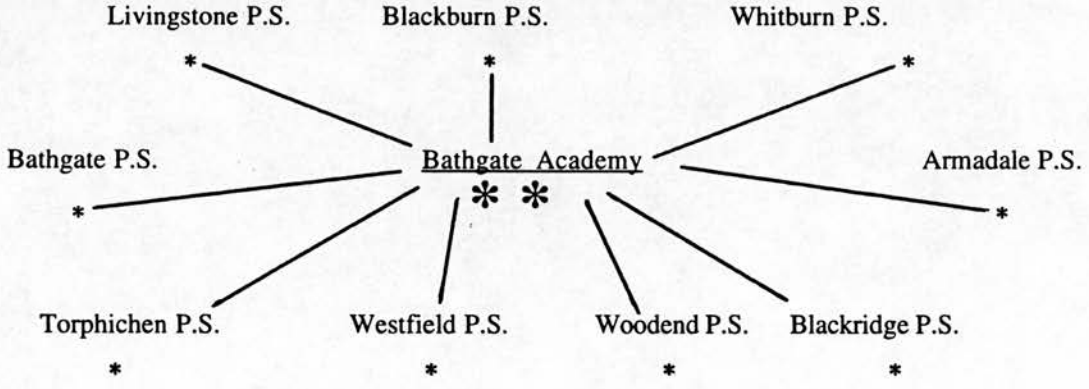
[559]"Commercial Training in Continuation Schools" EN May 9, 1913, p. 417.

students was due to their insufficient knowledge of English." Thus, the deficiency of the students general elementary education continued to haunt the progress of commercial education.[560]

The main drawback to the success of commercial education in Continuation Classes was that it was left to the authority of the School Boards. Boards could choose whether or not to institute classes, promote attendance, and develop courses. Edinburgh's efforts were by no means typical, and Glasgow's failures were cause for genuine concern. Also, there still was no national standard. In the end the determination of proficiency was left, as it was in 1899, in the hands of nearly 1000 School Boards.

Another satisfying development for the SED was the further organising and systemising of the work of schools during this period. With the advent of Organisers in many areas, local authorities worked toward removing duplication of work, and to a lesser degree having individual schools concentrate on particular fields. This was most pronounced on the county level, where Organisers such as Secretary Kemp for Linlithgow and Midlothian often made real progress. Kemp had placed Division I courses at convenient centres around the district with connections to the higher work of one village or city school. Figure 6.3 shows the organisation for one such district.

Figure 6.2: Schools Connected to Higher Work in Bathgate.

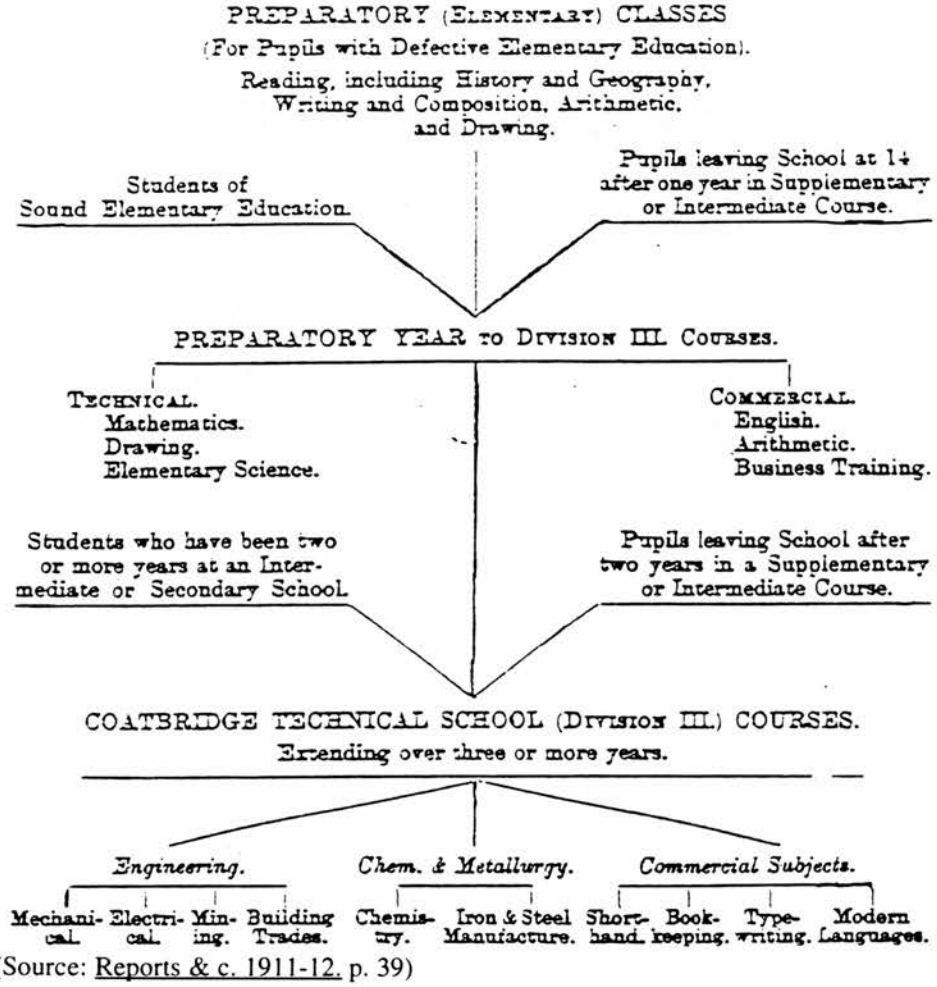


(Source: "Report on Continuation Classes, 1911" Jamieson)

560"Report for 1914" Jamieson, pp. 7 & 15.

Similarly Figure 6.4 demonstrates how the Old Monkland School Board solved the problem of organisation by directing the education of a large central population, and making provision and connections with schools that stood at a considerable distance from the centre.

Figure 6.4: Old Monkland School Board

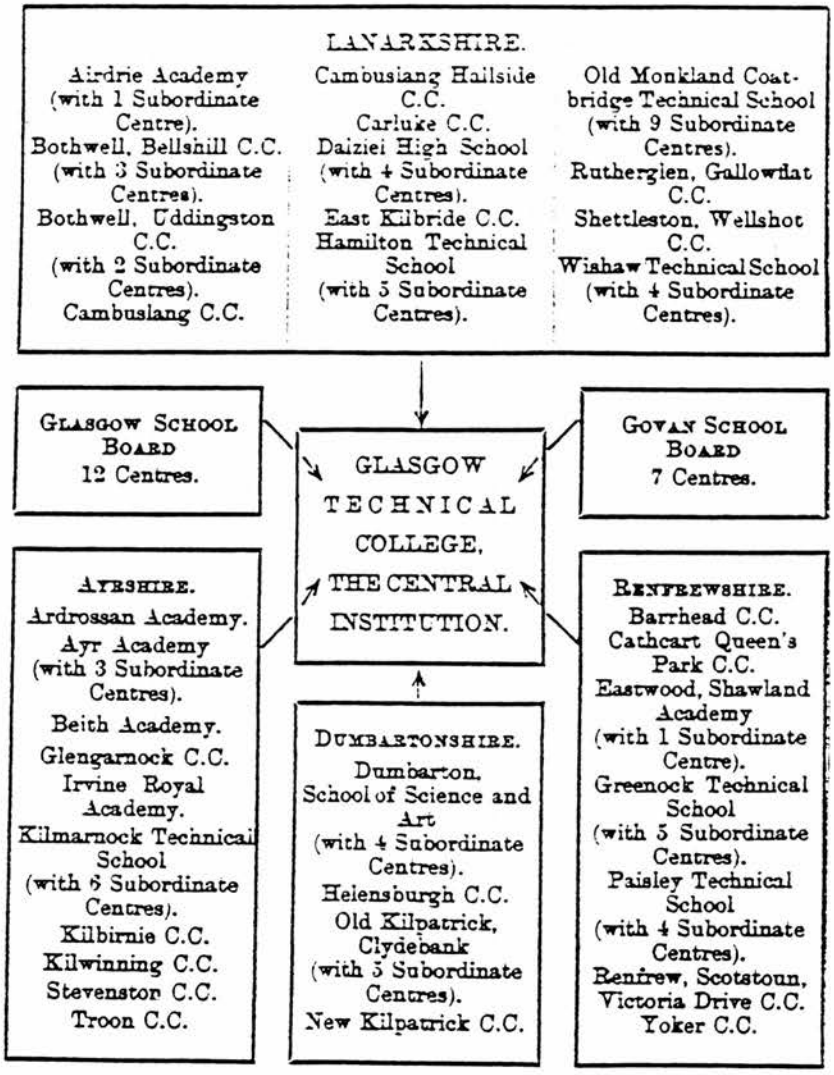


(Source: Reports & c. 1911-12. p. 39)

The SED was no doubt equally pleased by the continued improvement of co-operation and co-ordination between School Boards and the Central Institutions. While, like the systematising of Board work, this was by no means universal, more and more Boards were entering into schemes with Central Institutions. This particularly true in Glasgow and Edinburgh, where the Heriot-Watt College and the GWSTC/RTC actively promoted such initiatives. The basic arrangement was that students who had successfully completed a two or three years' course in the more Continuation Classes were granted certificates based upon the results of class-work, and class-examination, as well as on attendance, qualifying them for admission to the more advanced or specialised classes in the corresponding department of a Central

Institution.[561] However, during this period many Boards became formally affiliated to a Central Institution, issuing a Joint Prospectus as was done in Glasgow. These prospectuses served a dual purpose. Not only did they list classes, but also demonstrated how Continuation Classes fit into the work of the Central Institution and encouraged students to continue their studies. Figure 6.5 shows the local authorities affiliated to the Royal Technical College (formerly GWSTC).

Figure 6.5: Boards Affiliated to Royal Technical College.



(Source: Reports & c. Issued in 1911-12, p. 43)

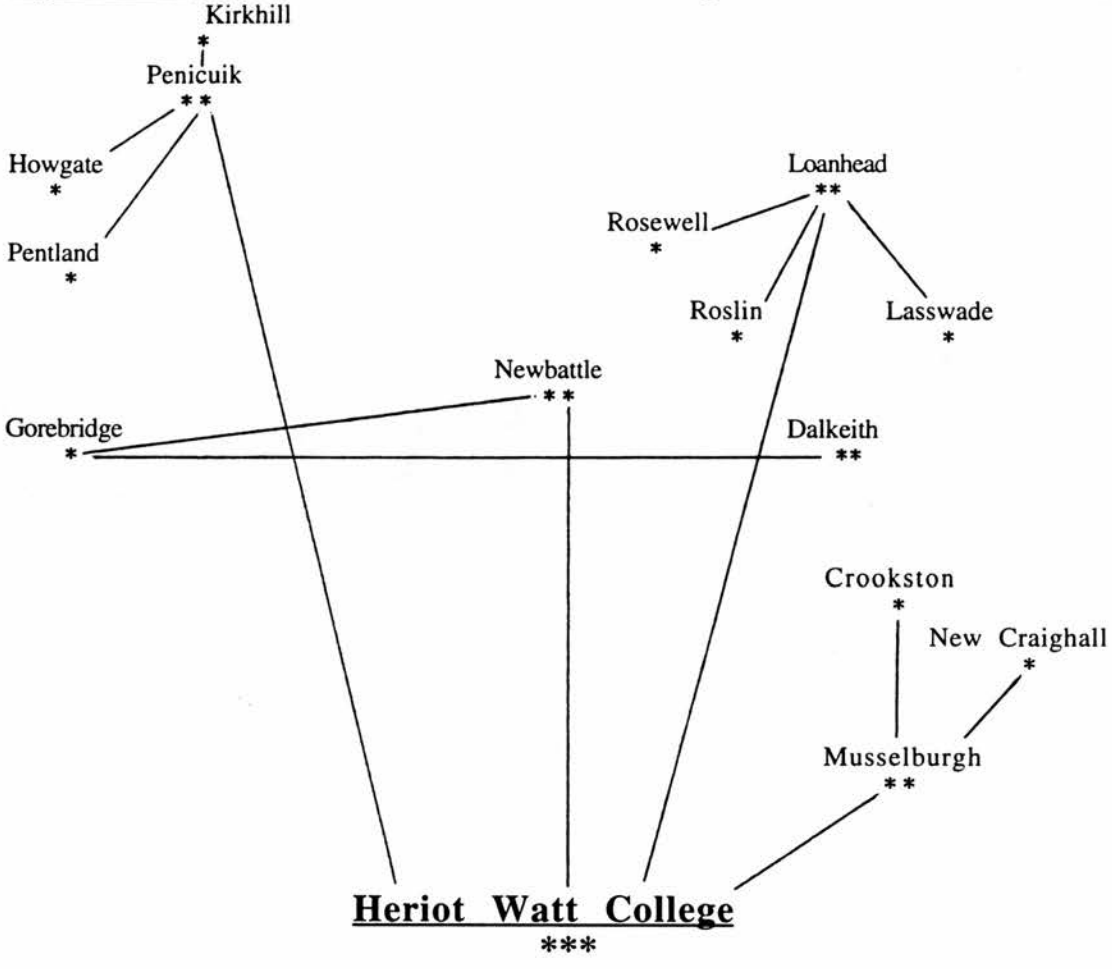
In Edinburgh the School Board had worked with officials at Heriot-Watt for many years. Typical of the local authorities there, innovative schemes were employed to encourage students to continue their studies. For example, an arrangement was made with James Prestell, who distributed yearly a fund provided by Mr. M'Ewan for

[561] "Report of the 14th School Board, 1911-14" pp. 34-35.

the payment of fees, that preference would be given to students who had received certificates of proficiency from their schools showing that they were able to go on to the more advanced technical, commercial, or art courses of the Heriot-Watt College of College of Art.[562]

Even more impressive was the organisation that had developed during the period connecting Continuation Classes outside of Edinburgh to Heriot-Watt. Figure 6.6 shows this regional connection to Heriot-Watt via smaller elementary continuation schools feeding into regional centres, and then connecting to the Central Institution.

Figure 6.6: Regional Connection to Heriot-Watt College.



(Sources: "Report on Continuation Classes" 1911 & 1913, Jamieson. p.11)

The result was that not only more students continued on to a Central Institution,[563] but the prestige and importance of the Continuation Classes also rose in the eyes of the students, businessmen, and the public at large. By the end of the

[562]"Report on Continuation Courses, Western Division, 1914" HMI Fraser, Reports & c. issued in 1914-15, p. 28; "Report by the Continuation Classes Committee, 1914-15" p. 13.
[563]Statistics in Chapter 7.

period it could be said with some degree of confidence that the "avenue from the Continuation Classes to the Central Institutions has been widened and shortened."[564]

Part V: Conclusion

From 1872 to the 1908 Act the organisation and substance of Continuation Classes was left almost entirely to the voluntary action of nearly 1000 separate School Boards in Scotland. The Act "laid upon these bodies a definite responsibility for the further education of adolescents." However, it had also left to the voluntary discretion of the Boards a great many powers. Paramount among them during this period was that of compulsion. By 1914 a mere 18 School Boards had exercised the power to compel attendance.

Of those opting to introduce compulsion Glasgow was the largest, and as such its experience could not be considered typical of Boards that did so. Smaller Boards seemed to have a degree of success after a period of initial difficulties. However, in Glasgow a series of problems and the resistance of the business community ultimately led to a moderating of the bye-law. It was not clear by the end of the period if this moderation would have a positive effect, but what was clear was that Scotland as a whole had not embraced the idea of compulsion.

The vast majority of Boards preferred a voluntary system, either from lack of public and business support, insufficient accommodation, lack of resolve, a fear of bringing a disruptive element into the schools, or any number of other reasons. However, there is nothing to suggest that any of the other Boards were as active as Edinburgh in securing higher levels of attendance.

Edinburgh seemingly used almost every method at its disposal to increase attendance in a voluntary method These included suitable courses at convenient hours, conferences with employers and workmen, co-operation with other agencies, appointing an Organiser, etc. The Board also used innovative ideas to encourage regular attendance, a high level of work, and the integration of the classes into the "normal" life of the students and the community. Some measures were minor such as class-rooms at several schools being open on Wednesday afternoons for those students who wanted to engage in private study.[565] Additional moves included: return of fee for 80% of possible attendance, award of prizes to those present every evening during the session, keeping in close touch with employers and parents by the Head Teacher, and adjusting the curriculum to keep it attractive. As a result not only did

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564"Report on Day Trade Continuation Classes" Main, p.1.
565"Class Work" EN Sep. 15,'11, p. 936.

enrolment rise, but attendance was good. Not one year from 1904 to 1913 did the average attendance drop below 90%, with a high of 95.5% in 1907.[566]

Most striking was the lowering of the percentage not in any type of education up to the age of 17. In 1910 it was estimated that there were 19,000 children between the ages of 14 and 17 in Edinburgh. Of that number 8,000 or 43% were not receiving any instruction.[567] By 1914 the population of 14 to 17 year olds stood 17,759 and those not enrolled was 6,469. This represented a drop to 36%. In many other centres the percentage enrolled fell below this level.[568]

Other areas prospered as well. In Dumbarton it was said that at no previous time had Continuation Classes enjoyed such a healthy opinion as it did after the 1908 Act. Leith had achieved a percentage enrolment on par with Edinburgh at 66%. Fife also experienced steady progress throughout the period, and in general in the more populous areas the outlook at the end of the period was good. Indeed, in 1914 those areas which had experienced growth and progress expressed a contentment that the large jumps in enrolment were over and system had settled down in a stable condition.[569]

This was not the case in the always troubled rural areas. Indeed, almost all of the development of Continuation Classes after the 1908 Act was restricted to the more urban areas. In the Borders the system was deemed "less than satisfactory". H.M.I. Macnair said that growth in the rural areas was "imperceptible" during the period from 1908 to 1914. In Perthshire H.M.I. Millar said in 1914 that it could not be claimed that even the foundation had "been laid of a satisfactory system of rural Continuation Schools."[570]

The general progress, and the exceptional success of Edinburgh should not be construed to indicate that problems did not remain. Many defects of significance persisted. At the end of the period the greatest one was consider to be the number of children not reached at all by Continuation Classes. Even in the best centres 64% eligible students were receiving instruction, but the national average was approximately 30%. H.M.I. Murray commented in 1913:[571]

> A walk along the streets during the evening in a busy industrial district and past the ubiquitous Picture House, shows clearly enough without the aid of figures what a

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566"Report on Day Continuation Classes, 1914" Main, p. 31.
567"Report on Continuation Classes, 1911" Jamieson, p. 9.
568"Report on 14th School Board, 1911-14" p. 25.
569"Report on Continuation Classes, Western Division, 1911" Fraser. "Reports on Continuation Classes, Southern Division, 1913, 1914" Jamieson.
570"Report on Continuation Classes, Southern Division, 1914" Jamieson, pp. 3 & 15.
571"Report on Continuation Classes, Western Division, 1913" Fraser, p. 31.

> large proportion of the young people are as yet untouched by the Continuation Class organisation.

The taking of single subjects was also still very prevalent. In addition, there was no sign that day classes would in the near future be put on a solid footing. The result was a waste of teaching power, and consequently financial waste, because the instruction was "given in the evenings when both teachers and taught are incapable of the most fruitful effort."[572] Furthermore, the establishment of day classes was seen as a crucial element to dealing effectively with the loss of the apprenticeship system. H.M.I. Macdonald believed that day classes were a necessity if there was to be any further development. Yet, he concluded in 1914 that Scotland had to have "something of the nature of an industrial revolution before the training of the apprentice can be put on a thoroughly satisfactory footing."[573]

The problem of exempts also continued through to the end of the period. While this was often the making of the Boards themselves, some attempted to solve the problem. For example, Leith addressed the problem in an innovative manner by setting aside one school, Dr. Bell's, and reserving it for exempts, with an extended session. Though many of the pupils had poor education attainments, the extended session provided greater opportunities than the normal session of twenty weeks. Coincidentally it was the school with the largest enrolment.[574]

Most important, many Boards simply did not assume the responsibility for Continuation Classes that was expected. By 1914 the SED had openly expressed as its ideal that School Boards should consider themselves responsible for the educational interests of the young in their areas to at least the age of 17. The critics correctly pointed out that, "Many moons shall wax and wane ere the Department's ideal will be realised."[575]

Yet these problems were not all of the School Boards' making or strictly speaking within their control. D. C. T. Mekie of Portobello said that the three obstacles standing in the way of Continuation Classes were home conditions, the intellectual and moral environment (this included an inordinate attention to sport and the "picture palaces"), and the hours of labour. In the analysis it would seem to be the latter that held the most weight. The attitude and active co-operation of businesses remained the crucial element to successful Continuation Classes. Over the years there was a steady number of businesses that began to take interest in the classes, but it was a slow process as there was no mandate and businesses had to be converted literally

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572"Report on Day Continuation Classes, 1914" Main, p. 2.
573"Report on Continuation Classes, Western Division, 1914, Fraser, p. 24.
574"Report on Continuation Classes, Southern Division, 1914" Jamieson p. 8.
575"Continuation Classes, The Immediate Future" Younie, J. EN May 22, p. 476.

one by one. Many speculated that what increased interest occurred was generated by a fear of compulsion if enrolment did not rise and their co-operation was not secured.

Industry wide initiatives were rare, though some existed. In Leith students connected to the ship building industry regularly had fees guarantied by businesses for their apprentices. Furthermore in District I of the Southern Division a series of 9 Trade Committees had been formed in connection with a Board's Employment Bureau (where one was present). Covering all the leading industries of the district, each committee had two employers of labour, two representative workmen, and two educationists. The Committees had no authority to compel businesses to act in a certain manner, but it generated many useful suggestions and was an important overture to the business community.[576]

Yet despite progress in many areas such as Leith, Edinburgh, and Dumbarton, the most enduring impediment continued to be employers and work schedules. For example, in Lanark H.M.I. Lamb related that the problem was "night shifts" on which pupils employed in coal pits were often able to attend classes only in alternate weeks or fortnights. Once the continuity of instruction was broken the less earnest type of student was prone to lose all interest and disappear.[577]

Even in areas where employers had expressed their theoretical interest in Continuation Classes such as Renfrew and Argyll industrial and educational interests were apt to clash in practice, and there was "little hope of a cordial reconciliation." The exceptions, such as the apprentices employed at a new torpedo factory at Gourock who earned an extra shilling per week for attending classes, could not hide the scale of indifference generally exhibited by employers. In Ayr there was described to be total apathy on the part of local employers. In Paisley a conference to which 50 local employers were invited was cancelled when none came.[578]

These problems, however, did not obviate the tremendous progress that was made. By 1914 Continuation Classes in Scotland enjoyed an enrolment level, organisation, and general enthusiasm that it had never before experienced. One of the most encouraging developments was the co-ordination and co-operation between Board classes and the higher instruction of the Central Institutions. H.M.I. Fraser reported in 1914 that in the larger evening school in the Western Division practically the whole of the work has been satisfactorily adjusted in graded courses affiliated to the Central Institutions. The relationship between affiliated classes and the Royal Technical College was firmly established, and all arrangements for certification of

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[576]"Report on Continuation Classes, Southern Division, 1914" Jamieson, p. 8.
[577]"Report on Continuation Classes, Western Division, 1911" Fraser, p. 23.
[578]"Report on Continuation Classes, Western Division, 1912" Fraser, pp. 36-37.

students worked smoothly.[579] This was much to the satisfaction of the SED. As is explored in the next chapter the SED strove for greater control over the Central Institutions than it had over the School Boards in regards to Continuation Classes. In that way they hoped to use the Central Institutions to influence and direct the work conducted beneath them.

If there was an enduring legacy of this era it was the number of students who left school without reaching the basic educational attainments represented by the MC. At its core the discussion over compulsion was not focused on apprentices, or hooligans, or loafers, but rather the general question of an acceptable basic level of education for the whole nation. While the ideal of the Continuation Classes was that they would serve as courses of higher learning, the reality was that they were a necessary element of trying to assure this basic level, and in that regard there was much work left to be done. One commentator wrote quite poignantly:[580]

> To keep Britain at the forefront of the world's progress, no child must be allowed to leave school till he has obtained the Certificate of Merit, or he must make up the deficiency by attending Continuation School.

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[579]"Report on Continuation Classes, Western Division, 1914" Fraser, p. 34-35.
[580]"Continuation Schools; From Various Points of View" EN May 31, 1912, p. 501.

Chapter 7: Central Institutions: Universities for the Working Class

> "no system of technical education is complete which does not provide for work at the University level, for that individual study and research which, however few may be fit for it, is yet of paramount importance to the progress of knowledge and the prosperity of the country."[581]

Part I: Introduction

The Central Institutions were to be the crown of the Continuation Class system discussed at length in Chapters 5 and 6. Just as the old universities of Scotland were the crown of the day school system, so too the Central Institutions for Continuation Classes in Scotland. They were to influence the course of study in the continuation Classes, just as the Universities did in the secondary schools. Indeed, their influence was envisioned to be even greater. It was hoped that, in contrast to the Universities' policy of contenting themselves with merely prescribing the subjects and entry qualifications, the officials of the central institutions would actually assist and advise in the framing of the curriculum in the Continuation Classes within their districts.

The Central Institutions were to be few in number so that resources could be efficiently concentrated, rather than widely dispersed. They were to be located in central locations around the country to provide access to all who could benefit. Relieved of elementary work, Central Institutions were to focus on the highest level of academic work. The SED could provide mechanisms and organization for success, but as with the Continuation Class system their success or failure was dependent upon forces beyond the control of Dover House. Educational officials were keenly aware that how much Scotland was to profit by the work of the Central Institutions was dependent upon employers and trade associations giving young people the opportunity to attend classes and providing adequate rewards for successful completion. It must never be forgotten that SED policy always took this crucial element for success into consideration at every step.

This chapter looks at a series of Central Institutions and their major developments over a course of years. In his regard it is relatively selective. By 1909 there were ten institutions that had received the distinction of "Central Institution" from the SED, this chapter will focus on three, and only two in-depth. The focal point of the study is not so much the progress of the Central Institutions themselves, but rather SED policy towards them. For this reason examples are discussed of schools that refused or were rejected for the special recognition by the SED. Finally, as the focus here as elsewhere is SED policy, the chapter looks closely only at episodes or events in which the SED fundamentally influenced or affected the Central Institution under

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581 "Selection of Circulars." p. 259.

discussion. For example, although the section on Heriot-Watt College discusses in a general manner developments in its curriculum, enrollment, and facilities, the focus is on the struggle that took place between the College and the SED over granting it Central Institution status. Throughout the emphasis is on Craik's desire for some level of central control of these institutions. In this manner it provides an excellent comparison with SED policy toward Continuation Classes. In that case, although a degree of central control was achieved, most of the decisions remained on a local level.

Part II: Refusal and Acceptance, SED Policy Toward Two "Minor" Institutions

Craik and the SED's vision for Central Institutions in Scotland was a firm one. A quick example illustrates the policy of Craik and the SED, and the stringent manner to which it was adhered. Some institutions such as the Technical School at Galashiels were refused status as a "Central Institution" because they did not adhere to the Departmental vision. In 1901 Crammond wrote to the SED asking that the technical school at Galashiels be granted such a status. Despite this personal appeal Craik and the SED refused. In a letter to Lord Balfour he said that this was not an institution of the kind contemplated for inclusion in the category of Central Institutions, and that he had no doubt of the expediency of uniting together technical schools rather than encouraging a system of small and inefficient ones.[582] Without the special distinction a school was unable to partake of the special grants for such institutions, and was at a distinct disadvantage. Though the Galashiels Technical School survived it never reached a high status and remained small. In 1906 it had day classes in only four courses, and evening classes in only six.[583]

This is just as the Department desired. The Central Institutions were to be few in number, and situated in convenient central locations. Thus, this limited number of recognized institutions would split the grant in a concentrated fashion, rather than having the available money spread over a large number of small, sporadic, and diffuse institutions. The end result would be, ideally, a group of institutions providing the best education to the great working masses of Scotland. In 1904 Craik illustrated this vision of the Scottish Central Institutions in a speech at the opening of new building as the burgh school in Kirkwall:[584]

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[582]Copy of Letter from Craik to Lord Balfour of Burleigh, Oct. 12th, 1901. ED 7 1/10/1.
[583]Weaving and Designing; Testing of Fibres, Yarns and Clothes; French; and German. Prospectus of Galashiels Technical School, 1906-07. G 28/8/4.
[584]"Sir Henry Craik at Kirkwall." EN Sep. 17, 1904, pp. 667 & 670.

> It was these properly organised schools--they cannot be numerous, and he would be sorry to see them multiplied; there could not be more than two or three or four for the whole of Scotland--which by means of their resources and the the high standards maintained would be worthy of Scotland.

This is not to suggest that the Central Institutions need have been large or situated in large cities. Several smaller more specialized institutions also gained SED recognition and support, and subsequently prospered. For example, the Leith Nautical College grew out of a government navigation school, and by 1903 was opening a new and expanded building; the first in the country erected solely for the purpose of nautical education.[585] Though it remained small (the new building could only accommodate 100 students, and only 67 were enrolled) the grants and support from the SED allowed the LNC to expand and improve in other ways. In 1901 it offered a simple syllabus of classes under Division II and III of the Continuation Class Code: Navigation, Marine Engineering, and Naval Architecture.[586] By 1903 the LNC had expanded this basic syllabus to include: Mathematical Basis of Navigation & Nautical Astronomy, Physics, Commerce, Shipbuilding, and Surgery and Medicine at Sea.[587]

Scotland's maritime heritage may have been a reason this relatively small institution received so much support from the Department, while others were allowed to die natural deaths as the process of weeding out the unhealthy and infirm turned into a policy of culling for Central Institutions. However, more important motives were at work; primarily the old tandem of national efficiency and international competition. At the opening of the new LNC building Lord Balfour of Burleigh spoke of the role of the battle for international supremacy. He said:[588]

> in these days of keen competition and international rivalry, the workman who best understood the scientific principles upon which his industry was based would...prove the fittest and the likeliest to survive in the great struggle for existence.

Providing for this sector of the Scottish work force, although long delayed, was also a sufficient use of resources. Those involved in maritime pursuits not only contributed to industry, but were also a key to the country's international commercial success.

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[585]"New Nautical College at Leith." Aberdeen Free Press. Jan. 27, 1903. ED 26 238-239, Part I.
[586]LNC: Syllabus of Instruction to Accompany Form A86. Aug. 8, 1901. ED 26 238-239, Part I.
[587]Letter from SED to LNC. Feb. 21, 1903, ED 26 238-239, Part I.
[588]"Lord Balfour of Burleigh at Leith. Inauguration of Nautical College." Scotsman. Feb. 6, 1903. ED 26 238-239, Part I.

The relationship between the Central Institutions and the SED was evolving during these years. The institutions, especially smaller ones like the LNC, obviously wanted monetary support. Craik and the SED wanted to have the ability to more effectively structure and direct this sector of Scottish education. The Nautical College received Science and Arts grants, and was recognized as a "special institution" under Article 87 of the Continuation Class Code. The latter assured that the LNC would receive a grant equal to as much as half of the cost of maintenance for the whole College each year upon certain concessions by the College.[589] It was this Article, meant to give the SED greater autonomy of purpose, that would prove to be most controversial. The full details are explained below in regards to Heriot-Watt College. What is interesting in the case of LNC is the way they received this distinction. Other institutions usually entered into a series of conversations and negotiations with the SED over the issue of "special institutions" status. However, in the case of LNC it was announced to them and all assembled during Lord Balfour's speech at the opening of the new college. He announced to the assembled crowd:[590]

> I am prepared on behalf of the Scottish Education Department, to say to you today that we consider this institution one not merely of local but of national importance--(loud cheers)--and we are prepared to regard it as an institution which should be considered under Article 87 of the Continuation Class Code...We are prepared on these conditions to wipe away altogether the existing method of payment.

Lord Balfour's energetic and impassioned public show of support for the College did not end there, however. He went on to tell them that they could be assured of at least an extra £100 a year in the block grant under the Article. Drawing attention to the fact that there was a debt on the building he was certain the SED could help with that as well. Where would this money come from? Balfour revealed: "Now I happen to know that somewhere concealed in the Scottish Education Department is a little hoard of money, jealously guarded by Sir Henry Craik...if properly approached he will be prepared to consider the propriety of helping you to wipe off that debt." The image of Craik lording over a secret cache of money is not unimaginable, but Balfour's message was much more simple: we have cash, meet our conditions and you get it. Was it bribery to relinquish control to the SED, or simply the type of support that in an ideal world is hoped for from a government agency?[591]

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[589]Special Minute under Article 87 Struthers, J. Dec. 22, 1903. ED26 238-239, Part I.
[590]"Lord Balfour of Burleigh at Leith. Inauguration of Nautical College. Important Announcement on Elementary Education." Scotsman. Feb. 5, 1903. ED 7 1/21 Part I.
[591]Ibid.

Part III: Heriot-Watt College, Edinburgh

1. Background to SED Involvement

In almost all senses Heriot-Watt College was the Central Institution of Edinburgh, and one of, if not the, most prominent in the country. The Department saw Heriot-Watt as part of a team along with its partner the Glasgow West of Scotland Technical College (GWSTC). They were to be two great Central Institutions located not only in the cities that were Scotland's largest but also the cities that were the focal point for the country's industry and commerce.

Heriot-Watt was not only an institution providing higher education in practical subjects related to industry and science, it was also an integral part of continuation education in Edinburgh; a system (as discussed in the last two chapters) often held up as a model for the rest of the country. At the turn of the century the College was comprised of four departments: the Day Engineering and Chemistry Classes, the Evening Technical College, the Evening Commercial Classes, and the Art School. The study will focus exclusively on the first three departments.

Though the study will focus on a period after 1900 it should not be forgotten that Heriot-Watt was already an important institution prior to SED interest in, and recognition of it as a Central Institution. At the beginning of the period in 1895 it had 3313 students in its Technical, and Literary and Commercial Departments. Its technical side was by far the more numerous with 3185 class tickets for the same year, against 1662 in the Literary and Commercial Department.[592] By 1900 the overall enrollment had grown to 4043, with 4249 class entries on the Technical side and 1870 on the Literary and Commercial.[593] Though little attention was paid to them, Heriot-Watt had day classes long before the SED made them a priority. Admittedly they constituted but a small fraction of the classes and enrollment at the College. For example, of the total of 3313 in 1895, only 82 were enroled in day classes.[594] Though they remained a distinct minority, attendance at day classes did rise considerably. By 1900 the figure had nearly doubled to 157.[595]

Heriot-Watt also had an admirable record of keeping up with changes in technology, and adapting its curriculum to the changing needs of Scottish business and industry. For most of its history it had catered to the artisan and "craft" interest of Scottish industry. However, its officials were cognizant of the changes that were occurring. They realized that in the future Scotland's economy would be less craft and artisan based, and more centred around industry and engineering. For example,

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[592]"Minutes of Heriot-Watt College Committee" May 31, 1895. HWC 1/2/9, pp. 59-60.
[593]"Minutes of Heriot-Watt College Committee" Jun. 1, 1900. HWC 1/2/14, pp. 71-72.
[594]"Minutes" May 31, 1895, p. 60.
[595]"Minutes" Jun. 1, 1900, p. 72.

during the 1898 session a class in Mining was added.[596] In 1899 the class in Carriage Building was discontinued, and dynamos and electric motors acquired.[597] In addition, the College had also been quick to embrace more theoretical fields of science such as physics; creating its first Professorship of Physics and Electrical Engineering in 1887.[598] The College's responsiveness and co-operation with Scottish industries was also admirable. For example, it was fundamental in improving the education in brewing, in both the scientific and engineering areas. Special courses were run at the College from the 1880s onwards.[599] A report of the same year to the SED gave the technical work of the College consistently high marks, the only criticism of substance being that enrollment had grown to the point that all students could not be suitably accommodated in the premises.[600] Thus, unlike the University of Edinburgh that more closely embraced the 'classic traditions' of education well into the 20th century, Heriot-Watt was adapting to the times in the 19th century.[601]

Indeed, Heriot-Watt was fundamental to the development of many of the University's more modern departments, despite the fact that University historians often omit the contribution. For example, in *The History of the University of Edinburgh, 1883-1933* the story of the Engineering Department was written by Professor Hudson Beare of the University. Beare made significant improvements in both the syllabus and content of engineering courses in the early part of this century, due in part to close cooperation with Heriot-Watt. Yet when Beare wrote the history of the department he failed to mention the important part the College had played.[602] Whether this was by accident or design is difficult to determine. Subsequent histories, however, have righted this wrong and recognised the role the College played during this period.[603]

With the election of Dr. A. P. Laurie as Principal in September 1900 Heriot-Watt was poised to enter a dynamic era in its history.[604] Characteristic of many Central Institutions, especially after the changes to the Continuation Class Code in

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596"Minutes of the Meeting of the Heriot-Watt College Committee" Sep. 30, 1898, GWC 1/2/13, p. 106.
597"Minutes of the Meeting of the Heriot-Watt College Committee" Nov. 3, 1898, p. 138.
598Physics at Heriot-Watt University, 1821-1992. Wallace, L. E. (Edinburgh, 1993) p. 21.
599A History of the Brewing Industry in Scotland. Donnachie, I. (Edinburgh, 1979), pp. 153-54.
600"Report on the Heriot-Watt College, Edinburgh. Session 1898-99" Blair, R. HWC 1/2/13, p. 120.
601See generally, Donaldson, G. "Some Changes in the Classroom of the Twentieth Century" in Donaldson, G.(ed). Four Centuries: Edinburgh University Life. (Edinburgh, 1983), pp. 149-163.
602Beare, H. "Engineering" in Turner, A. L. (ed.) History of the University of Edinburgh (London, 1933), pp. 272-276.
603For example, Birse, R. M. Engineering at Edinburgh University: A Short History, 1673-1983. (Edinburgh, 1983), p. 108 & pp. 112-115.
604"Minutes of the Heriot-Watt College Committee, Sep. 10, 1900. HWC 1/2/14, P. 95.

1901, was an attempt to expand curriculums, generally raise standards that had long been criticised, and possibly most importantly to direct students into definite, structured courses of study. For years the norm had been for students to take a smattering of courses, often unrelated to each other, and with no clear aim in sight. However, if you entered Heriot-Watt during these years it is likely you would be required to study towards a certificate, leading on to a full diploma if one so chose. The question of how many pupils actually stayed on to finish a structured course of study will be discussed later.

Pupils entering Heriot-Watt at this time were confronted with a constantly changing educational landscape. For example, in 1901 as an effort to raise standards the Heriot-Watt College Committee voted to introduce a Preliminary Entrance Examination for those students entering the day school to do a diploma course.[605] The requirements to receive a diploma of the College were themselves toughened. Diplomas would only be awarded to those who had passed the entrance examination[606] and either completed (a) a full course in Engineering (including Electrical and Mechanical) or Technical Chemistry in the Day Classes, or (b) a course in the Evening Classes in the former or other subjects that was regarded as equivalent to the curriculum of the Day Courses and passed the final examination. Intermediate Certificates were available for day students who had completed two sessions in Engineering or Chemistry. The day class in Chemistry was in and of itself new, and the course in Engineering was made more thorough by extending it from two to three sessions.

Later in the summer of 1901 the College extended its revisions to the evening classes. A first link was formed between the evening classes and the day classes. Students holding Evening Class Certificates in a variety of subjects[607] would be exempted from the Preliminary Examination and admitted directly to the second year's day course. As a means of addressing the disjointed nature of many students studies the College purposed regulation with the direct sanction of the SED. Most important was the arranging of the Evening Class Syllabus in groups so as to "guide those who

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[605]"Minutes of the Meeting of the Heriot-Watt College Committee" May 31, 1901. ED 26/ 293.
[606]Students of the Day classes were examined in four topic areas: 1) English, Composition and writing to dictation. 2) Mathematics, including Arithmetic, Geometry, Algebra. 3)Freehand Drawing and Elementary Geometrical Drawing. 4) Elementary Physics or one of the following language-French, German, or Spanish. Students would be exempted if they had passed the London University Matriculation Examination or the Scottish University Preliminary Examination, and they would be exempted from subjects for which they hold Higher Grade Leaving Certificates. See, "Minute of Meeting of Sub-Committee of the Heriot-Watt Committee". July 4, 1901. p. 1-2. ED 26/293.
[607]Mathematics-Stage 2; Inorganic Chemistry-Stage 2; Machine Drawing-Stage 1; Physics, Electricity-Stage 1; Organic Chemistry-Stage 1; Mechanical Engineering-Stage 1. Ibid., p. 2.

enter on a course of study with a view to making themselves thoroughly proficient in some department of commerce or technology."[608]

Entrance qualifications were also introduced for evening students. Those wishing to enter elementary classes in commercial or technical subjects were required to pass an entrance examination in English and Arithmetic unless they held the SED Merit Certificate.[609] Those failing to meet these conditions could enter Preliminary Classes in Arithmetic and English. Those wishing to enter advanced classes had to produce a certificate from the elementary class of the same subject or some other corresponding proof of qualification; if not they would have to pass an entrance examination.[610]

In addition, the Intermediate Certificate was abolished for evening students and was replaced by a standard College Certificate.[611] This Certificate of the College was approved for evening students who had completed course work in one of twelve different subjects, including Mechanical, Mining, or Electrical Engineering; Commerce; Building Trades etc.[612] The hope was, that by providing certificates to aim towards, students would be encouraged to attend regularly and for sustained periods of time, pursuing a definitive course of study.

2. Heriot-Watt and the Scotch Education Department

Friction, if not outright conflict, between the authorities of Heriot-Watt and the SED was not new to this time period. It was endemic when a privately run institution came into contact with a government run bureaucracy. For example, early in 1896 the SED wrote to the College about inspecting it in terms of Section 19 of the Educational Endowment (Scotland) Act 1882. The SED proposed an inspection of the Technical Classes of the school by an inspector specially appointed by them. The College's response, while not a refusal, was certainly lukewarm. Furthermore, it informed the SED that the Technical Department of the College was already tested annually by the Department of Science and Art and the City and Guilds of London Institute, as well as inspected by the the Inspector of Science and Art Schools in the district. They concluded: "In these circumstances it would seem to be undesirable that the Inspector

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[608]Ibid., p. 3.
[609]A student could also be exempted from the entrance examination if 1) they held a certificate of attainment from another Evening Continuation School, 2) attended one year at senior classes in a recognised Secondary School, or 3) were over twenty years old. Ibid.
[610]Ibid.
[611]"Minutes" May 31, 1901. ED 26/293
[612]"Minutes" Jul. 4, 1901. ED 26/293.

appointed by the Scotch Education Department should make a detailed examination of the classes."[613]

Yet, while it was logical that the developments discussed above should have a positive impact on the institution, there was one very real drawback: the College began to operate a fiscal deficit. One reason was the adoption of the entrance examination. Ideally it would raise the level of student, thus making the course and teaching more efficient. However, it also reduced the number of students attending Heriot-Watt, and thus shrunk its income from fees. After years of growth total enrollment fell back in 1901 to 3923 students.[614] This made it even more dependent on the relatively meagre grants of the SED, despite the endowments the organisation possessed. In 1900 before instituting the entrance exam the College had a surplus income over expenditure of £83, and by the following year Heriot-Watt was running a deficit.[615]

However, SED support for Heriot-Watt was strong especially with regards to the expected role it would play in the Continuation Class system. But government support and money came at a price. The Governors of this old and established organisation had to allow the venerable institution to be molded in the image of SED policy, and that meant Craik's vision of its educational role and character. Certainly the leaders of the College had been moving in a similar direction on their own accord, but with a deficit looming the College, once supported almost solely from the George Heriot Trust, had to begin considering if it would accept SED conditions.

This new policy mandate by the SED was made possible by the new Continuation Class Code of 1901. Through it Craik and the SED were able to implement their long term policies with regard to Continuation Classes, especially in the case of Central Institutions. At issue in the case of Heriot-Watt and the Code was Article 87.[616] This clause allowed the SED at its discretion to exempt any special institution eligible for grants under the Code from its operation, and substitute, with the consent of the Treasury, a special minute embodying the conditions under which a grant would be made to the institution. In turn the special grant would cover no less than one-half of the annual operating costs.

In 1901 the SED laid out 10 conditions that Heriot-Watt had to meet in order to gain grants and be exempted from articles of the Continuation Class Code. One group of conditions assured that the government would not only have direct input into the educational affairs of Heriot-Watt, but also in some cases oversight. For example, the government demanded the right to approve the conditions upon which certificates and

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[613]"Minutes of Heriot-Watt College Committee" Jan. 13, 1896, HWC 1/2/10, p. 7.
[614]"Minutes of Heriot-Watt College Committee" Jun. 28, 1901, HWC 1/2/15, p. 115.
[615]Letter of July 8, 1901, From George Heriot's Trust to the SED. ED 26/292.
[616]See Appendix A for wording of Article 87.

diplomas of the College were awarded. In addition, the scheme of work for the College had to be annually submitted to the Government for approval, and the qualifications of all lecturers and teachers were to be submitted to the Department for approval. There was nothing new about Craik's desire to see the SED have a more direct and central control over educational policy in Scotland as a means of implementing a coordinated series of reforms, but this case illustrates it better than most.[617]

Significantly the SED provided guide-lines to which the instruction of the college must adhere. These conditions, in line with overall SED policy and Craik's convictions, would further shape the curriculum and course of study at the College. The Governors were directed that their first priority was to strengthen and enlarge the day department generally, and particularly for the study of Applied Science. Also, they must begin to make provisions for trade classes; a group of classes they were slowly shedding as discussed above. Most importantly, the SED mandate called for the College to concentrate on advanced work:[618]

> no classes other than those of an industrial and technical character shall be established, nor classes of an elementary standard maintained in other than the Trade subjects...without the express sanction of the Department.

However, another goal of the Department was not expressed to the Governors. The SED undoubtedly wanted to have greater input into the institution as discussed above, but it also hoped to "systemize" the Central Institutions. An internal letter to Craik supported the proposition that the drafters were trying to establish a continuity of purpose and administration among the Central Institutions of Scotland. It was revealed that several clauses of the minute were copied from a similar minute of conditions for the GWSTC. Thus putting the two institutions on a similar footing with regards to the SED.[619] Indeed the minute had already been proposed to and accepted by other similarly situated institutions throughout Scotland.[620] However, the case of Heriot-Watt would be different, and the controversy that ensued would provide a battleground between the independence of Central Institutions in Scotland, and the authority and control over this sector of education that Craik and the SED sought.

The leaders of Heriot-Watt were none to eager to accept all of the mandates of Craik and the SED. A Memorandum by Peter MacNaughton, the Law Agent to the College, outlined the traditional, if not strictly legal, commitments the College had to

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[617]"Read Article 87 of the Continuation Classes Code" Draft Minute. ED 26/292.
[618]Ibid. Clauses 8 & 9.
[619]Minute sheet of July 26, 1901. Containing note to Sir Henry Craik and copy of letter to the Governors of George Heriots. ED 26 292.
[620]"George Heriot's Trust". Scotsman. Nov. 12, 1901. ED 26 292.

the George Heriot's Trust, and its Scheme of Administration made by the Commissioners under the Educational Endowments (Scotland) Act of 1882. In addition, he pointed out areas where the SED's minute conflicted with these guidelines and commitments. For example, Clause 62 of the Scheme indicated that the College would make provision for the "general" education of the industrial classes, rather than focusing solely on advanced work. Also, Clause 65 places the emphasis of the College on Evening Class instruction, not the development of day classes. Clause 75 gave the Governors the sole authority to appoint or dismiss professors, lecturers and teachers, in contrast to submitting to SED approval on the matter.[621]

Most fundamental, however, was the tradition of control that had to be overcome. Under Clause 63 the management and control of the College was entrusted to the Heriot-Watt College Committee, no mention was made of the SED. Furthermore, Clause 103 mandated that the Governors had to administer the endowment "exclusively in accordance with the Scheme." Thus, MacNaughton concluded that the Governors had no power "to delegate the management of the College to any other authority."[622] His conclusion was profound, as it seemed to indicate that the Governors simply could not negotiate control or authority of the College, nor agree to any SED demands that conflicted with the Scheme under which the College was run. MacNaughton stopped just short of saying legal action could be taken if they did.

Despite the tenable legality of the action, officials of Heriot-Watt entered into a long process of negotiations with the SED in an effort to amend the clauses of the minute throughout the summer and autumn of 1901. A plethora of correspondence was exchanged between the two parties.[623] In it College authorities stressed the need to amend the Minute, especially in regards to the areas mentioned above. In response Craik gave little ground, and it became obvious that he saw the Minute as an offer to be rejected or accepted (a point he would make more strenuously later). The SED did,

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[621]"Memorandum Regarding the Proposed Minute for Exempting the Heriot-Watt College from the Operation of the Continuation Class Code" MacNaughton, P. HWC 1/2/15, p. 153.

[622]Ibid. pp. 153-54.

[623]Surprisingly Principal Laurie remained above the fray. His personal and official letters during this period do not give any indication as to his feelings or position on the issues surrounding the SED. Indeed, he rarely deals with the topic at all in this correspondence, preferring to commit himself to the continuing day to day needs and operations of the College. When he does mention the negotiations with the SED it is in most formal terms. For example, in a letter to the Secretary of the Merchant Venture Technical College, Bristol he simply states that the matter is still under consideration by the Governors. This would also tend to indicate that it was the Governors who had the primary input on the issue, and who made the decisions regarding it. When he did turn his attention to the SED after the matter was settled, it was in an effort only to obtain the maximum grant possible. Letter of Sep. 28, 1901. From Laurie to Secretary MVTC, Bristol; Letter of Nov. 6, 1901. From Laurie to Russell, J. Principal Laurie Letter Book No. 1 HWC 3/1/10, p. 845 & 981 See also, Letter Books No. 2 & 3. HWC 3/1/11 & 12; and Principal Laurie Private Letter Book No. 1. HWC 3/1/2.

however, moderate in some areas. For example, while it would not back away from its commitment to have Heriot-Watt concentrate on advanced work, it was willing to agree to a gradual process of change and considering the views of the Governors.[624] But this was a minor point in an otherwise resolute stance.

With negotiations coming to naught, MacNaughton wrote to Craik on August 2nd asking him to meet personally with a deputation from Heriot-Watt in London. Craik agreed, but requested a full written statement of all the deputation wanted to discuss.[625] In this written statement MacNaughton laid out the points of contention. Principally, they remained the same as before. However, he also related to the SED how each one conflicted with a Clause of the Scheme of the College, as well as the general traditions of the College.[626]

The Deputation met with Craik and other SED officials in London on August 9th. Though minutes of the meeting are not available, there was evidence that it was productive for Heriot-Watt. Following the meeting Craik sent a revised Minute to Heriot-Watt which, while fundamentally the same, was revised to a greater extent than the SED had ever allowed before. Most significant was the dropping of Clause 9 which called for the College to concentrate on advanced technical and industrial work, and not maintain classes of an elementary standard. However, other areas previously objectionable to Heriot-Watt remained. These included the requirement to submit qualifications of lecturers and teachers to the SED (Clause 2), that Diplomas and Certificates of the College be awarded on conditions approved by the SED (Clause 6), and that student admission requirements be approved by the SED (Clause 7).[627]

In September a Special Committee appointed by the Governors to consider the Amended Minute concluded that the SED had not gone far enough. It recommended rejecting Clauses 2, 6, and 7. In addition, they called for Clause 8 to be modified to make certain that evening classes continued to receive first consideration by the Governors.[628] Craik had finally had enough, and matters came to a head as Craik travelled to Edinburgh in October of 1901 to meet with another deputation from the College at the Museum of Science and Art.

Those representing the College acknowledged that it may have been unusual for there to be such hesitation over the terms and conditions for the grants, but they made equally clear what their central and over-riding concern was: the sweeping

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[624]Letter from Craik to MacNaughton. Jul. 26, 1901. HWC 1/2/15, p. 161.
[625]Letters from MacNaughton to Craik, Craik to MacNaughton, Aug. 2 and Aug. 5, 1901 HWC 1/2/15, pp. 162-63.
[626]Letter from MacNaughton to Craik. Aug. 7, 1901 HWC 1/2/15, pp. 163-164.
[627]Letter from Craik to MacNaughton, Aug. 13, 1901. With accompanying Amended Minute. HWC 1/2/15, pp. 165-166.
[628]"Minute of Meeting of the Heriot-Watt College Committee" Oct. 4, 1901, HWC 1/2/15, p. 139.

nature of the control the College would be relinquishing. This was compounded by the fact that the entire trust was administered under a scheme that the leaders of the College felt bound to uphold. At the meeting Mr. Shaw put forward the core of the Governors' concern:[629]

> even if the clauses of the Government minute, taken one by one, were capable of a reasonable construction, it was felt that in their cumulative effect they seemed very much to make the government of the Trust just a working committee of the Scotch Education Department..that to accept the minute would be virtually an abnegation of the powers and initiative entrusted to them.

The next point of concern addressed the second of the SED's two prong policy: controlling the character of the educational institution. The leaders of the College objected to the "radical change in the character of the institution that seemed to be, if not immediately, ultimately contemplated."[630] It was felt that such changes as the active development of day classes would take away from the very purpose and function the College had been designed to perform. As such, this type of change could only be achieved through the will of Parliament, not that of a government department and its head.[631] The position of the College with regard to day classes is not totally surprising. Only a small percentage of its students attended during the day, and its historical role had been centred around evening work.

However, Craik was having none of that. Acts of Parliament took time, and generally had to propose large reforms not ones specific to an institution. In addition, during this time several education bills for Scotland had floundered and failed in Westminster. For Craik these reforms were not only necessary, but crucial to the future of Central Institutions and Continuation Classes in Scotland. In a rare outburst of anger from the normally reserved and cerebral SED Head, Craik lashed out at the deputation for considering that there were ulterior motives behind the Government's proposals, and admonished them for looking for such "lurking between the lines and concealed between the words of the Department's letters."[632] He further accused them of not being primarily concerned with what was best for the institution and for the city of Edinburgh.

Craik also maintained, in a classic example of dual logic, that all were in agreement that the best place for the management of the institution was in the hands of the Governors appointed by the scheme. However, as Parliament had put the SED in

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[629]"The Heriot Governors and the Education Department". Scotsman. Oct. 26, 1901. ED 26 292.
[630]Ibid.
[631]Ibid.
[632]Ibid.

charge of a Code regulating grants certain matters had to be ordained by the Department. For example, on the matter of the appointment of teachers Craik asked if the SED was expected to award grants to be paid for teachers of whose qualifications the Department was not appraised and approved? In short the SED would and must keep control over the conditions upon which grants were allocated, even if that meant less autonomy for the individual institution.[633]

Then Craik played the SED's trump card, an ultimatum of sorts. Craik informed the gathering that despite their view that the minute was somehow unfairly crafted and directed solely at Heriot-Watt, the minute was in fact one the terms of which were general and communicated to all institutions.[634] Upon these broad terms the SED had the agreement of the Treasury. In take it or leave it style, Craik confronted the deputation with the fact that the Code and the minutes were not contracts between the Government and institutions, but rather declarations on the part of the SED, with the authority and concurrence of the Treasury, of the conditions upon which grants could be allowed. It was for the Governors to judge whether they could fulfil the conditions or not.[635]

Despite this the two sides entered into another, although short, round of negotiation over amendments to the minute and its conditions after this meeting. The position of Craik and the SED changed little. A few days after the meeting Craik wrote to Macnaughton stating that the SED had to have a guarantee that any grant would be used for Continuation Class work and instruction consistent with the general tenor of the minute, no matter how it ended up being worded.[636] Also, while Craik voiced respect and deference to the Scheme under which the College operated, he made it clear that no grant would be sanctioned if reference was made in the Minute to clauses of the Scheme.[637]

As the first year of the new century drew to a close the two sides reached an agreement, and the SED prevailed in the substance of the minute if not the exact wording. Although the wording of some clauses was slightly altered, the basic tenets of SED conditions were retained. Heriot-Watt would still have to annually submit a scheme of work for the College for SED approval. The SED had to be informed of all

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[633]Ibid.

[634]This statement is supported by examination of the draft minute sent to the GWSTC, which was identical to the original sent to Heriot-Watt. The GWSTC after debating the special minute accepted it without amendment. See, "Minutes of the Meeting of the Governors, 13th June 1901." GWSTC Minutes of Governors and Committees, 1901-1902, pp. 41-42. E 1/1/9.

[635]"The Heriot Governors" The Scotsman.

[636]Letter to Macnaughton from Craik. Oct. 31, 1901. ED 26 292.

[637]Ibid; Letter to Lord Balfour from Craik. Nov. 7, 1901; "George Heriot's Trust". Scotsman. Nov. 12, 1901. ED 26 292.

appointments of teaching staff and be satisfied with their credentials. Likewise, regulations regarding qualifications for entrance had to be submitted, and conditions of awarding Diplomas and Certificates had to be approved by the Department. The crucial Clause 8 which instructed the College to make provision for trade classes, and to strengthen and enlarge its day school remained although in a weaker form. The only clause that was removed completely was the controversial one that mandated that the College no longer maintain classes at their elementary level (other than those in the trades), and not establish classes that were not of an industrial or technical character.[638]

After the final meeting in Edinburgh outside observers sided with the tough stance of Craik and the SED, and admonished Heriot-Watt officials for their demands of special treatment. One commentator wrote that the Heriot Trust had found Craik "too hard a nut to crack". It was observed that the Heriot-Watt Governors "assumed that they were not as other people," and that whatever Codes and SED minutes said to the contrary "the Heriot Governors must have their way". Officials at Dover House were congratulated for treating "them like other mortals, to their profound amazement." Furthermore, it was concluded that if the College was to benefit from SED grants "it must accept them on the same terms as other institutions", and Craik was lauded for aiming to make the College "a great technical school for the East of Scotland."[639]

The significance of this controversy is three-fold. First and foremost, the issue of control of not only Heriot-Watt, but also the system and progress of continuation education as a whole in Scotland was at stake. Even though Craik and the SED often lamented that it was in essence a big misunderstanding, that they had no desire to govern this educational arena, the reality seems to have been much different. The new Continuation Class Code, the composition of the special minutes, and the fact that Craik was steadfast that all such institutions should adhere to its basic tenets bear out a different sort of truth. While the SED may not have had a desire to be in charge of the day-to-day management of the institutions, it did want to assure that with regards to the Department all were abiding by the same regulations, promoting the same type of education, and headed n the same 'Craikian' direction.

This was the over-riding principle to which the Heriot-Watt Governors objected. The meeting of the Governors in November of 1901 made it clear that they felt the proposed conditions were "an attempt to take out of their hands the control of

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638"Special Minute under Article 87 of the Continuation Class Code". Dec. 10, 1901. ED 26 292.
639"The Week" EN Nov. 16, 1901, p. 814.

Heriot-Watt College, and to vest it in the authorities of Dover House."[640] To this point there was a great deal of sympathy which not only revealed the traditional Scottish belief in locally organized and controlled education, but also a relatively new distrust of the governmental department based in London. It was believed that: "A body on the spot must have better knowledge of the needs of a locality than any body of educational experts, and the regulations of the details of Scottish education can be most effectively carried out in Scotland."[641] This controversy showed that despite this sentiment, Craik and the Department were determined to have, if not total at least partial, control and input in order to mold an efficient national system; rather than one directed by uncoordinated local efforts.

Second, as mentioned above, the new Continuation Classes Code of 1901 was designed to give the SED greater power to expand and coordinate Continuation Classes throughout the country. A key component of it was that such classes were no longer to be solely the province of evening schools. Craik saw developing the day schools of the Central Institutions as an integral element of making them truly national rather than local in nature, and thus a truly effective element in the drive for industrial efficiency. During the height of the negotiations he said to the Governors of Heriot-Watt:[642]

> if the work was to be done in its highest form there must be a day department, extending its influence even beyond Edinburgh, influencing all those evening classes and giving the younger men who were the pioneers in manufacturing and industrial work the very best opportunities of prosecuting their studies.

One of the key stumbling blocks in the discussion between the SED and Heriot-Watt was this determination on the part of the Department that the College should expand its day classes. And it was upon this point that the Governors that controlled the College resisted most strongly. They viewed it as a threat to their control of the institution and the endowment scheme under which they operated. Craik viewed such talk by the Governors as an inherent and counter productive weakness in them. In a letter to Lord Balfour he said the Governors of Heriot-Watt used the scheme to "shelter themselves in their effort to foster the Elementary Evening classes at the expense of the larger ambition of a great Central Institution...They have obviously developed the Evening Classes too much." It was also suggested that the whole issue of day versus evening classes was a social issue. Evening classes were typically regarded as to be in the interest of the working class, while day classes were regarded

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[640] Scotsman. Nov. 12, 1901. ED 26 292.
[641] Ibid.
[642] Scotsman. Oct. 10, 1901. ED 26/292

as being for the rich. Craik wanted to break that distinction for the greater benefit of the city and the country.[643]

In the end the Department substantially got its way, and the College bought itself some time to implement the mandate. It can not be said that this issue brought down the class distinctions in Scottish education, but it was about more than who or what organisation called the shots. Day classes were seen by Craik as the foundation and future of Scotland's 'Great Central Institutions.' They would be the catalyst to establish technical and industrial education on the highest level rather than having it relegated to a smattering of late night classes taken by workman exhausted by a long day's work. It would later appear that Principal Laurie was converted to Craik's way of thinking. In 1906 he said that evening students would benefit from the systematic study of day courses, and "it would be well worth while, for the sake of our technical progress, to bring [them] down to the Day Classes."[644]

Finally, in the midst of this controversy and debate Craik's commitment to having great Central Institutions becomes clear. He was convinced that Edinburgh needed one of these institutions developed to the highest standard of technical education. Heriot-Watt was to be that institution, but to do so it had to move beyond the loosely organised evening classes it embraced. Craik told the Governors:[645]

> the provision for technical education in Edinburgh would never be complete until they had some such technical institution of the highest character over and above the evening classes, giving meaning, giving help, giving stimulus to these continuation classes, and maintaining for them the highest standard.

Transference of the elementary work that they previously embraced elsewhere, predominantly the Continuation Classes, would allow them to concentrate on their new role as the providers of advanced technical instruction. Diploma courses would lead on from the continuation courses, and all would concentrate on technical, industrial, or in some cases commercial subjects. In this manner Craik told them to view the minute as an ideal, and they should let the institution of Heriot-Watt work towards that ideal.[646]

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[643]Letter to Lord Balfour from Craik, Nov. 7, 1901. ED 26/292

[644]"Reports Received by the Department on the Work of the Session 1904-1905 (Central Institutions Conducted Under Article 87 of the Continuation Class Code; Edinburgh, Heriot-Watt College, Report by the Principal." PP XXX 1906, p. 782.

[645]Scotsman, Oct. 10, 1901. ED 26/292

[646]Ibid.

3. Years of Cooperation, Expansion, and Delay.

The SED had long hoped for greater co-operation between Heriot-Watt and the University of Edinburgh, and once in active control they openly encouraged it. However, co-operation, although tentative, between the two institutions had begun prior to the entrance of the SED. In 1900 a special committee was set up to consider the relation of engineering teaching at the College and the Engineering Chair at the University.[647] Educationalists of many persuasions had encouraged such co-operation as a way of placing the more technical work of the Central Institution on par with the university level instruction. It was believed that this would accomplish several things. First, and most obvious, the educational quality of the courses would improve. Second, as a means of efficiency, it would help to eliminate any unnecessary duplication of classes. Third, and most importantly, it would help to raise the status of the work done at the Central Institutions in the eyes of the public.

Such co-operation was slow and sporadic. There were, after all, conflicting interests and goals between the two establishments, and the SED itself had placed them into different spheres of the educational arena. For example, the University did not operate in the area of Continuation Classes, yet a large proportion of Heriot-Watt students attended such classes only at night. Despite continued growth in the day classes in 1904 there were 3,949 students enrolled in evening classes, and only a mere 179 in the day classes.[648] The Principal acknowledged that many of the evening students could have benefited from the more systematic instruction of the day courses. Yet two years later there were 3,741 attending in the evening and only 236 during the day.[649] The Scottish Universities had also been slow to embrace the practical technical and commercial studies that Heriot-Watt was, in essence, established to foster.

However, some avenues for cooperation were nurtured that over a period of years would work to the mutual benefit of the two institutions.[650] In 1901 the two educational institutions found it desirable to come to an agreement for the purpose of establishing a joint curriculum of study for the degree in Engineering Science, and for co-ordinating instruction in Engineering at the University and Heriot-Watt. An advisory panel made up of members of both institutions, including professors and the Convener of the Heriot-Watt College Committee, drew up a joint curriculum of study and examination each year that was submitted for approval to the Edinburgh

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[647]"Minutes of the Heriot-Watt College Committee" Nov. 30, 1900, HWC 1/2/14, p. 147.
[648]"Edinburgh, Heriot-Watt College, Report by the Principal." PP 1904 XXI, pp. 674-678, p. 677 & p. 678.
[649]"Edinburgh, Heriot-Watt College, Report by the Principal." PP 1906 XXX, p. 782.
[650]Birse, Engineering, p. 108.

University Court and the Governors of George Heriot's Trust.[651] By 1904, after two sessions in practice, students of the University preparing for a degree in Mechanical Engineering and Mechanical Engineering Drawing attended classes at Heriot-Watt during their second and third year. Indeed, all of the practical work for University degrees in Engineering and Electrical Engineering was carried out at the College.[652]

The agreement itself, though limited in scope, was a product of the age of efficiency. A letter from the Heriot Trust Offices to the SED in London declared the hope that the cooperation would "tend to greater efficiency of teaching and be of greater utility to the students."[653] It also had an unexpected benefit for the College. Though not officially a University their relations with the University of Edinburgh allowed them to apply for and win a grant from the Carnegie University Trust for the updating of their electrical laboratories.[654]

By 1904 an agreement had also been reached between the two institutions with regards to the College's departments of Electrical and Mechanical Engineering. The University accepted the work of these departments as qualifying towards its degree in Science. For example, the College course in Mathematics qualified towards the University degree in science; and Mechanics and Physics, as equivalent to one University course in Natural Philosophy, qualifying for the B.Sc. in Pure Science.[655] But it was only the work of the Day Department that was readily accepted. It was here that the work of Heriot-Watt was considered to be advanced and on a standard with that of the University. Night classes were all but ignored. Thus, Craik's belief in putting advanced classes on a day basis to raise their status bears out.

This relationship continued for some years. In 1912 the arrangement was made reciprocal so that Heriot-Watt students could obtain a degree in Civil, Mechanical, or Electrical Engineering. The first year of the degree was done at Edinburgh University, and the second partly at each institution. In the third year the majority of the Mechanical and Electrical Engineering course was at Heriot-Watt, while the whole of the Civil Engineering course was at the University. Though outside of the time period of this study, it is interesting to note that the relationship continued into the 1920s in the areas of mining, and technical chemistry and chemical engineering in the 1950s and 60s respectively.[656]

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[651]"Minute of Agreement, between the Court of the University of Edinburgh and the Governors of George Heriot's Trust. July 9, 1901. ED 26 292.
[652]"Memorandum For The Information Of The Carnegie Trustees" pp. 1-6; p.3. ED 26/292.
[653]Letter of July 8, 1901.
[654]"Memorandum" Letter From Macnaughton to SED. Oct. 14, 1904 ED 26/292.
[655]"Memorandum For The Information of the Carnegie Trustees" p. 2. ED 26/292.
[656]Birse, Engineering, pp. 113-116.

Also promoted was a closer relationship between the Central Institutions and the Continuation Classes below them. The SED held a definitive vision of what function the Continuation Class system should serve. Part of this vision was that Continuation Classes should lead "naturally" to the Central Institutions, and encourage students to move on to the higher training of institutions such as Heriot-Watt.[657] In this position the Central Institutions could truly be considered the 'universities' of the industrial and commercial classes of Scotland. In turn the Continuation Classes would serve almost as pseudo "secondary schools" for the workers of the country; bridging the gap between the elementary school at one end of the system and the Central Institutions at the other. The goal was to foster co-operation and co-ordination so there was an "organic connection" between the Continuation Classes and the Central Institution.[658] The focus of this cooperation was on Division III classes (although some of those in Division II also lent themselves to the process). This was for three reasons. Most obviously because the Division III classes represented the highest level of the Continuation Class system, and therefore the most efficient bridge to the Central Institutions. Second, many of the Central Institutions already carried out some of these classes in the evening, separate from the college proper. Finally, the Division III classes had not lived up to the expectations the SED had set for them. Connecting them more closely with the Central Institutions was seen as an avenue to raising the quality of the work done and their stature in the eyes of the public. In accordance with this philosophy the Governors of Heriot-Watt sought greater co-operation between the College and the Edinburgh School Board. In 1903 the Governors appointed a sub-committee to meet with a corresponding sub-committee of the School Board. They were to concentrate on adapting the commercial and industrial instruction in the School Board Continuation Classes to the more advanced instruction offered at the College.[659]

This was yet another step in coordinating the education system so as to eliminate duplication of purpose, and have each sector of the educational system performing to its strengths. For example, duplication was seen to exist in some of the preliminary and elementary classes. For that reason Heriot-Watt, in consultation with the School Board, dropped its classes in Preliminary English and Arithmetic. However, despite the duplication of effort it chose to continue its preliminary classes in technical and commercial topics. Furthermore, the two groups agreed to draw up a

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[657]The strides made in this area by the GWSTC as well as the Glasgow Athenæum Commercial College are discussed in upcoming sections devoted to those institutions.
[658]"General Report for the Year 1903." p. 589.
[659]Letter From Macnaughton to SED, Apr. 13, 1903. ED 26/292. See also, "Minutes of Meeting of the Heriot-Watt College Committee" Feb. 25, 1903, HWC 1/2/17, p. 40.

scheme of work in elementary, technical, commercial, and industrial subjects to be undertaken in the Board's continuation schools.[660] The two sides approved the scheme of work and the Principal of the College was appointed under the joint arrangement to supervise the standard of the certificates granted to pupils from the Board's Continuation Classes.[661]

Creating a "natural bridge" from the Continuation Classes to the Central Institutions was the main focus. Though Edinburgh had one of the more progressive School Boards and successful systems of Continuation Classes, there were few students progressing on to Heriot-Watt. In the year the sub-committee was established an Inspector observed:[662]

> The classes in the Heriot-Watt College are doing excellent work, when viewed by themselves; but as yet there is little natural organised flow of pupils from the continuation classes of the School Board to the College at recognised and well-defined stages of progress.

One of the first steps was recognition by the College of the certificates of the continuation schools. The entrance exam necessary for certain elementary classes of the College was waived for those students holding a MC. Beginning in the year after the sub-committee was formed, candidates holding certificates representing similar attainment from a continuation school could also by-pass the entrance examination to advanced classes. In 1905 an agreement was reached whereby pupils possessing 'Certificates of Proficiency' in a Division II course could be admitted to the advanced classes in the corresponding subject at Heriot-Watt.[663] It was reasoned that by integrating the School Board in this manner it would give the city's Continuation Classes a definite standard to work towards.[664]

Later the School Board and Heriot-Watt published a "Joint Prospectus and Directory of Evening Classes", and inspectors identified the co-operation as a major factor in the "marked revival of interest in Continuation Classes in Edinburgh."[665] At the same time inspectors spoke of the steady improvement in the calibre of student and work done. This is not to be doubted, but the question which is raised is how pervasive was the effect. The work done by the Edinburgh School Board and Heriot-Watt was regarded as one of the most successful efforts at cooperation. Yet in 1907

660"Minutes of Meeting of the Heriot-Watt College Committee" May 29, 1903, HWC 1/2/16, p. 93.
661"Minutes of Meetings of the Heriot-Watt College Committee" Jul. 29, 1903, HWC 1/2/16, p. 137.
662"General Report for the Year 1903." Stewart, p. 589.
663"General Report for the Year 1905." Scougal, p. 680.
664"Report of the Principal on the Work of the Heriot-Watt College, Session 1905-06" Minutes of Meetings of the Governors. HWC 1/2/20, p. 156.
665"General Report for the Year 1907." p. 755.

Principal Laurie of Heriot-Watt reported that, despite all the words of praise, only 25 students had passed from the school board classes to the College.[666]

A final area of co-operation was familiar and common to the School Board's Continuation Classes. This was the area of co-operation with employers. Much like his counterparts on the School Boards, Laurie often bemoaned the lack of co-operation and enthusiasm from local business. For example, soon after his appointment as Principal, Laurie highlighted the need to encourage engineering firms to pay more attention to the technical education of the College.[667] There were some minor successes, however. For example, the Master Plumbers' Association donated an annual two guinea prize for plumbing students at the College.[668] However, overall the participation of local employers was poor. Renewed efforts to encourage employer involvement occurred after the appointment of an "Organiser" for the College which is discussed below.

These years, following the adoption of the Department's special Minute, were times of profound growth and expansion for Heriot-Watt. Although the final draft of Clause 8 of that Minute weakened the directive to enlarge and strengthen the day school, the following year blue-prints were at the ready for a proposed new extension to the College. Certainly the SED policy and funds helped this process, but the Governors were also swayed away from their tireless defence of evening classes by a report of the Council of the British Association of Technical Institutions, and the twin industrial threats of Germany and America. In 1902 James Steel, the Lord Provost, quoted from a report by the CBATI:[669]

> The Council realises the immense importance of the technological work done in Evening Classes...But the scope of evening work, however excellent, is necessarily limited, and it is clear, therefore, that we must look for the most part to day work for training of character which will enable our future captains of industry to compete with the best trained products of German and American Technical Institutions.

Despite the adoption of the special Minute under the Continuation Code, there was no money forthcoming from the Government for the physical expansion of the College. The grant which Heriot-Watt would receive under the Code would be equal to half of the annual maintenance of the College. Therefore, the Governors were left

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[666]"Report by the Principal on the Work of the Heriot-Watt College, Session 1906-07." Minutes of Meetings of the Governors. HWC 1/2/21, p. 176.

[667]Letter From Laurie to J. Gray. Aug 29, 1901. Letter Book No. 1, p. 750. HWC 3/1/10.

[668]Letter from Laurie to Nicoll. Sept. 10, 1901. Letter Book No. 1, p. 785. HWC 3/1/10.

[669]"Appeal in the Interests of Technical Instruction in the East of Scotland. Statement by the Governors of George Heriot's Trust with Regard to the Extension of the Heriot-Watt College." p. 2. ED 26/292

on their own to raise money for the additional buildings. Once the money was raised and the extensions built, the SED was bound to meet its obligations with regards to the annual cost of running the College, including the new work. The SED also indicated that if local contributions were raised a matching contribution from the General Aid Grant could be made, but the process would take time.

In their personal appeal to business patrons and wealthy philantropists the Governors played on the popular themes of the day: industrial efficiency, and foreign competition. They wrote:[670]

> Considerable progress in Technical instruction has been made in Great Britain during the past twenty years, but we still fall so far behind Germany and America, that the number, size, and quality of the institutions in the latter countries, as compared with the British, do not admit of comparison, but only of contrast...[Scotland] is now left conspicuously behind in all that concerns those studies which tell directly on the national industrial welfare.

The Principal outlined the extensions necessary to meet "modern requirements." It was concluded that the Engineering Department required a new elementary laboratory, a new workshop, and an advanced laboratory. The Electrical Department needed substantial additions, including a larger elementary laboratory, an additional lecture room, a larger heat laboratory, and an enlarged dynamo-testing room, etc. The Chemistry Department was in much the same state, presenting a catalogue of needs for additional space and equipment. Finally, it was hoped to establish a Mining School and an endowed Professorship of Mining. All that stood in their way was money.

While the Governors had to seek patrons in order to build physical extensions to the College, this was not the case in regards to expanding the day course work and the curriculum in general. All that need be done was to institute the course and the SED was bound under the minute to help pay for the annual expense of it. But was this a guarantee of swift, efficient reform and expansion?

By the 1902-03 session the College was undertaking additional work with varying degrees of success. The four main departments that witnessed curricula expansion were: Mechanical Engineering, Chemistry, Electrical Engineering, and Mathematics. The latter actually did not incur any additional teaching hours, but rather re-arranged the curriculum so as to provide a four years course in Applied Mathematics. Chemistry had a second year course added in the Day Department, and there was an increase in the number of hours of lectures for the evening course in

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[670]Ibid. p. 4.

Electrical Engineering. However, the biggest changes occurred in Mechanical Engineering. There the Day Department was expanded to include a third year course comprised of three lectures and one tutorial per fortnight. In addition, the Evening Department added a laboratory class in applied Mechanics.[671]

The problem which was immediately confronted by the College was that even these relatively modest academic reforms were a step ahead of the students. Rather than being the bastion for the industrial leaders and innovators as Craik had enjoined, the Mechanical Engineering course only had four students in the Day Department. They had performed so poorly that the third year course for them had to be postponed for a year while they repeated some of their second year work.[672]

Undeterred the leaders of Heriot-Watt pushed forward, proposing a plethora of new academic initiatives for the coming years. A total of five new evening classes[673] and a series of lectures on special topics were to be added in Mechanical Engineering, and a third year course was to be added in the Day Department of Electrical Engineering[674] and Chemistry. The Chemistry Department was also to institute a series of lectures by practical experts on a wide variety of topics. However, the greatest change came about in the area of Trade Classes.

Heriot-Watt had a weaker tradition of providing trades related classes than other institutions such as the Glasgow & West of Scotland Technical College (discussed in greater detail later in this chapter). For example, the GWSTC had been awarding Trade Certificates for a course of study in classes such as Book-Binding since 1896. In addition, early in the period Heriot-Watt had made efforts to do away with some of its remaining classes. However, the special Minute had mandated that it make provision for these classes.[675] In 1902-03 Heriot-Watt proposed to increase instruction in and funding for instruction in Drawing, advanced instruction in House Painter's and Decorators Work, Photo-Process Work, and Lithography.[676] Adding to

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[671]"Additional Work Undertaken During the Present Session 1902-1903". Appendix A. ED 26/292. See also, Heriot-Watt College, Calendar 1902-03. HWC 2/10/29. pp. 25-26, 35, 40, 43.

[672]Ibid.

[673]Engineer's Quantities; Tenders and Estimates; Metal Plate Working; Heat Laboratory for elementary and advanced Prime Movers students; and Pattern Making and Moulding. Ibid. See also, Heriot-Watt College, Calendar 1903-04. HWC 2/10/30, pp. 81-91.

[674]Additional evening courses were also proposed for Electrical Engineering, including Electrical Machine Design and Electro-Metallurgy.

[675]It should be noted that the SED's determination to introduce and supply Trade Classes was a key part of its policy toward the group of students under discussion. In Chapter 6 they were discussed as part of the Continuation Class system. However, the SED started earlier with regards to Central Institutions. Their mandate to school boards to introduce them as part of Continuation Classes did not come until the 1908 Act.

[676]"Copy of Draft Minute Sent to Treasury" Final Draft under Article 87 of the Continuation Class Code. ED 26/292. See also, "Minutes of Meeting of Heriot-Watt College Committee" May 29, 1903, HWC 1/2/16, p. 91.

their sparse provision of trade classes, (which included Cabinet-Making, Carpentry & Joinery, Plumbers' Work, and Watch & Clock Making), Heriot-Watt proposed no less than six new courses.[677]

All of this development of the classes at Heriot-Watt did not come cheaply. In the 1902-1903 session £2,528 was expended on the four departments undergoing revision. It was estimated that the increase in expenditure in order to meet the proposed developments would be £1,735; an increase of 68%.[678] It was impossible to increase the expenditure from the trust, so the College was completely dependent upon an additional grant from the SED.[679] However, even such a grant under the terms of the Continuation Code would only cover half of this new expenditure, and took time to be applied for.

In the mean time during the current 1902-1903 session the additional classes and extensions to the curriculum were carried out using the existing staff of the College without remuneration. An additional 57 hours extra work was spread out amongst the staff in what the College's Law Agent described as hopefully "a temporary expedient."[680] Astonishingly the SED only offered an increased grant of £300 for that session. In a bizarre twist, as the arrangement of staff and remuneration had actually incurred no extra expense to the Trust even that meagre additional grant had to be turned away.[681]

Nearly a year after the original plan for additional classes and curriculum had been sent for SED approval, Heriot-Watt was again submitting proposals to get the grant that had been assured to them under the long negotiations over Article 87 of the Code. Craik had promised that signing on as a Central Institution under governmental oversight would not take the management of the College from the hands of the Governors, but rather give them "freedom" in their pursuit of a high standard of education.[682] However, this very premise has to be called into question. The Heriot-Watt staff had already worked extra hours for one academic year without remuneration. Would the money to allow the expansion come through for the next year?

The essence of Article 87 has been discussed at length above, but at its core it was the promise of a block grant for as much as one-half of the annual operating

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[677]Bookbinding, Wood Carving, Silversmith Work, Glass Staining and Leading, Ornamental Iron Work, and Photography.
[678] "Note of Approximate Expenditure" Appendix C. ED 26/292. See also, Calendar, 1902-03. pp. 177-188.
[679]Letter From Macnaughton to SED. Feb. 10, 1903. ED 26/292.
[680]Ibid.
[681]Letter From Macnaughton to SED. Apr. 13, 1903. ED 26/292.
[682]Scotsman. Oct. 26th, 1901.

expenses of the institution. However, once that amount was set it remained at that level for a certain number of years.[683] This caused two problems. First, the institution was required to make certain commitments to increased expenditure; in new trade classes and enlarging the day department, for example. But the institutions in essence had to have the money to pay up front. Then the SED would reimburse them after the Treasury had determined their annual expenditure. Second, the nature of the fixed grant meant that once it was determined it would remain static for as many as five years. Thus, soon after the acceptance of the minute, the managers of Heriot-Watt had to hurry and draft a proposal that would encompass all the adjustments they hoped to make for a period of several years.

The managers of Heriot-Watt resubmitted a proposal for addition work in the summer of 1903, to begin in the 1903-04 academic session. The plan was similar in character to the proposal of a year ago. The same general changes were proposed to affect the same departments. It had, however, been scaled back to an additional cost of only £1017.[684]

The SED and Heriot-Watt also worked out an agreement whereby additional grants could be made in additional years covering up to one half of new work undertaken.[685] It did not necessarily mean the beginning of a smooth partnership between the two. Indeed, over the years there was a rash of small disputes, usually quickly settled but demanding a great deal of time and paperwork. For example, in 1904 a small problem erupted when actual expenditures exceeded estimates and Heriot-Watt requested extra money to make up the difference.[686] The following year the Department declined to award money to cover the cost of repairs and replacement of furnishings at a cost to the College of £586.[687]

Overall, the problems, though frequent, were small and fairly quickly resolved. Although some placed a greater burden on the College, and delayed action (in the case of the new and expanded curriculum it was upwards of two years). A case in point: in 1906 the College proposed creating a chair in Industrial Bacteriology. It already had a laboratory for instruction in Fermentation and Industrial Bacteriology with a full-time instructor. An appeal to the SED for money to establish the chair was

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[683]Article 87. Continuation Class Code of 1901. PP 1901 LVII.

[684]"Additional Work Proposed To Be Undertaken During the Session 1903-04" Dated June 9, 1903. With accompanying letter from Macnaughton. E 26/292.

[685]Letter From Macnaughton to SED. Jun. 24, 1903. With accompanying return letter and report. E 26/292.

[686]Letter From Macnaughton to Craik. Mar. 7, 1904. With accompanying return letter, and note of opinion from Struthers. E 26/292.

[687]Letter From Macnaughton to SED. Nov. 18, 1905. With accompanying return and opinion paper. [To put the figure in perspective a new instructor in Machine Drawing had a yearly salary of £165 per year. (Report of 9th Nov. '03. E 26/292)].

rejected, but Heriot-Watt was told that if they found increased local contribution then the SED would be obliged to a corresponding increase. Thus, the College was forced to go out and solicit funds from private concerns (mostly local brewers) before the SED would make a matching grant. In this case it was accomplished and the Chair established,[688] the delay was short and the burden relatively light. But this was not always the case.

Earlier in this section there was described the plans of the Governors of Heriot-Watt to expand the physical plant of the College in order to bring it up to the modern standards and requirements of the day. It was determined that the Engineering, Electrical, and Chemistry Departments need substantial additions and new equipment. This was first proposed and funds solicited in 1902; just after Heriot-Watt had been officially recognised by the SED. At the time the SED was not forthcoming with funds. The College was informed, similar to the case of the new Chair above, that if local contribution could be raised then an application could be made for a contribution from the General Aid Grant.

It took five long years, until finally in 1907 the Governors of Heriot-Watt made such an application for a contribution to complete the new building. Vacant ground adjacent to the existing College had been purchased at an expense to the Trust of £9300, and had to be repaid to it in annual instalments. The estimated cost of the new building was £8000, plus another £500 to transfer certain machinery and purchase some new apparatus. In total £3750 had been raised by private subscriptions of which £2750 was to be used on the new laboratory. Heriot-Watt asked for an equal sum from the SED, plus a contribution equal to half the value of the site,[689] for a total of £5750.[690]

With local contributions and the site already purchased with the aid of Trust money it was only a matter of days before the SED approved the payment of a grant of £5750.[691] This seeming quick efficiency belies the fact that it had been five years since overtures were first made for funds to build the new laboratories and work space. It also disregards the reality that of the three major areas of development outlined by Principal Laurie five years earlier as necessary to meet modern

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[688]Letter From Macnaughton to SED. Jan. 6, 1906. See also accompanying letters of Jan. 8, Jan. 10, and Feb 16, 1906. ED 26/292.

[689]Accounting measures allowed for a temporary devaluation of the site with regards to the amount owed to the Trust as it was not to be immediately fully appropriated for use by the College. Also, certain tenements in the Cowgate which extended backwards and interfered with the building had to be purchased. In all, the value of the site was deemed to be £6000, of which half was asked from the SED. This plus the matching grant of £2750 equals the total of £5750.

[690]"General Aid Grant, Heriot- Watt College." Application made to the SED by Heriot-Watt by Macnaughton, March 4, 1907. ED 26/292.

[691]"By The Secretary's Direction" Mar. 8, 1907. ED 26/292.

requirements of industry and international competition, only one was coming to fruition.

A year and a half later in September 1908 the new engineering laboratory of the Heriot-Watt College was opened amidst much fanfare and congratulatory praise. It was comprised of a new Heat Engineering Laboratory with gas, oil, and steam engines; an Iron Workshop with modern shaping, milling, drilling, and planing machines; a Wood Workshop with equally up to date equipment; and a modern Mechanics' Laboratory. At the time it was one of, if not the best equipped engineering laboratory in the country.[692]

The opening ceremony on the 16th of that month was attended by a cadre of distinguished ladies and gentlemen, and presided over by the Earl of Rosebery. In his speech Rosebery recounted the progress made by the College and asserted that the work done in its evening classes was comparable to the work of trade and commercial schools in Germany. The work of its day classes was the work of the technical universities of Germany. He congratulated in equal part the students of the College and their contribution to industrial efficiency, "Each acquisition they make, each art, each science, each method by which they increase their industrial efficiency is so much added to material gain."[693]

Yet even in the midst of this celebration and praise, there was caution and a sense that the future must bring additional changes and improvements. In addressing the assembly Rosebery was diplomatic yet clear in conveying his view that changes still had to occur. For example, he envisioned a day when each technical institute in the university towns would specialise in one field and thus not duplicate each other.[694] In addition, the threat of international competition threaded through his speech. Rosebery was most ardent in his remarks regarding the lack of progress made by the day classes at Heriot-Watt. He concluded:[695]

> Day students...are those who are able to come and give the whole vigour and freshness of their day to the work of study....if you could multiply the number of day students, if it were found possible for employers to give their apprentices days for study here besides the evenings...surely both the students and the employers would find their reward. And if this institution is ever to receive its full development that fact will have to be

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[692]Report by the Principal on the Work of the Heriot-Watt College, Session 1908-09" Minutes of Meetings of Governors. HWC 1/2/23, p. 205.

[693]"Address Delivered At the Opening of the New Engineering Laboratory in the Heriot-Watt College." Rosebery. (pamphlet) ED 26/292, p. 18.

[694]Ibid., p. 17.

[695]Ibid., p. 15.

> recognised, and the number of day students will have to receive a great increase.

Rosebery's remarks were not so much criticism, as a view for the future, and a recognition that some problems and impediments that had been with them for a long time had yet to be solved. A new Education Act for Scotland now in place, the new engineering laboratory now built after six long years, it was not a time for reflection. Rather it was a time for assessment and confronting the future yet again.

4. The Legacy of SED Involvement and Conclusions

The relationship between Heriot-Watt College and the SED is important as it sheds light on the difficulty individual Scottish institutions often had when dealing with the central educational authority at Dover House. Plans to expand, in this case trade and technical education, often stalled as the institution waited for approval and money; often re-submitting proposals. The arrangements under the new Code certainly made more money available, but it is debatable whether it made the process more efficient. Despite the comparatively minor nature of subsequent disputes, the often difficult process of dealing with the London based SED was illustrated.

These difficulties also had an impact on the decision making process of other schools and colleges as they decided whether or not to come under the SED umbrella. The case of the Incorporated Weaving, Dyeing, & Printing College of Glasgow, discussed in the next section, is evidence that the rumoured difficulties at Heriot-Watt did not do anything to persuade the authorities in favour of SED over-sight.

After this initial period direct involvement by the SED with Heriot-Watt was rare. There is little evidence that they ever rejected the credentials of a proposed teacher, or in other ways interfered with the day to day affairs of the College. Most disagreements were, as was usually the case, over money. The 1908 Act affected Central Institutions very little. Its main impact for purposes of this study was on the Continuation Classes, and thus impacted on Heriot-Watt only as it had developed closer ties to the Continuation Classes of the Edinburgh School Board. This reflects the most significant legacy of SED involvement, and the area where it most encouraged action after this initial period: co-operation among educational authorities.

Early on it was perceived that the co-operation and co-ordination between College and the Board Continuation Classes was a positive influence on the latter. In 1905 it was written that a result of the relationship was "to level up the standard of work" in the Board classes.[696] Such co-operation continued throughout the period. For example, in 1910 the scheme of co-operation between the College and Board was

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[696]"Report on the Work of the Session 1904-05" HWC 1/2/19, p.127.

extended to include the subject of Plumbing, and a syllabus was prepared that covered a period of two sessions at the Board Continuation Classes after which qualified students were allowed to enter the more advanced instruction at the College.[697] Many additional efforts at co-operation and co-ordination were discussed in Chapter 6 in relation to the progress of the Board's classes. These included the increase in the number of Board Continuation Class students who went on to the College, which grew steadily throughout the period as the table below illustrates[698]

Table 7.1: No. of Students Taking Advantage of Coordinating Scheme.

Session	Number of Students
1905-06	26
1906-07	25
1907-08	134
1908-09	152
1909-10	186
1910-11	197
1911-12	209
1912-13	320
1913-14	341

However, it is important to look at what impact this relationship had from the College's perspective. One impact was that it facilitated relationships with other local educational authorities. For example, in 1911 the College extended its area of co-operation and affiliation to include Fifeshire Continuation Classes. It recognised the work of the following: the Mining Courses in Buckhaven, Dysart (Viewforth), Kirkcaldy (High School), Dunfermline (High School), and Cowdenbeath (Mining School), and the Engineering and Building Courses at Dysart, Kirkcaldy, and Dunfermline.[699] Table 7.2 shows the development of enrolment from County Continuation Classes in the later part of the period when the College began keeping records.

Table 7.2: Enrolments of Students from County Continuation Classes.

		Clackmannan	Fife & Kinross	Haddington	Linlithgow	Mid-Lothian
Individual Students	1913-14:	3	20	7	20	46
	1912-13:		28	4	10	33
	1911-12:		27	8	25	38

[697]"Report by the Principal on the work of the Heriot-Watt College, Session 1909-10" Minutes of Meetings of Governors. HWC 1/2/24, p. 234.
[698]"Report by Assessors" HWC 1/2/28, p. 121.
[699]"Minutes of Meeting of Heriot-Watt College Committee" Mar. 32, 1911, HWC 1/2/25, pp. 80-81.

The College also took the step of appointing an "Organiser" who would have the sole responsibility of acting as conduit between the College and Board Continuation Classes. J. M. Mackintosh was appointed to the position, and had an almost immediate impact. By 1912 several improvements had been made that increased the efficiency of co-ordination, including drawing up a revised scheme for Commercial Certificates and revision of work done in the County Continuation Classes to bring it in line with instruction at the College.[700] In addition, to his work with the Board's Mackintosh extended his duties to include contacting employers to try and convince them to guarantee fees or in some other way encourage their charges to take up classes. The best example was the Albion Motor Works which not only guarantied fees, but also gave extra pay for successes at Continuation Classes. Mackintosh considered this a model for other companies, and drew up a report on this and other such schemes to distribute to employers.[701]

Continued efforts made by both the College and the Board, with the encouragement of the SED, seemed to have turned the tide on the earlier disappointments regarding co-operation. By the 1912-13 session it was reported:[702]

> During the past session the link between the Continuation Classes and the Heriot-Watt College has been materially strengthened, both in technical and commercial work. The scheme of co-operation is working with pleasing smoothness."

This leads directly to the second legacy of SED involvement: reduction in enrolment. At the beginning of this section it was noted that a reduction in enrolment was instrumental in Heriot-Watt becoming involved with the SED. In 1895 the College had an enrolment of 3,313, and reached a high of 4,176 during the 1903-04 session. After becoming a Central Institution enrolment fell more or less steadily until it stood at just 2,810 at the end of the period in 1914. The policies of the SED not only caused this decline, but the grants allowed the College to survive and prosper despite them. As discussed above a central element of Article 87 and SED policy was that Central Institutions should strive toward high standards and instruction only in advanced work. This policy directly resulted in the fall in enrolment. For example, in the 1904-05 session the raising of the "severity" of the entrance exam, and advertising

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[700]"Report by Principal on the Work of the Heriot-Watt College, Session 1911-12" Minutes of Meetings of Governors. HWC 1/2/26, p. 214.

[701]"Report by Organiser of External Technical and Commercial Classes, Session 1911-12" Minutes of Meetings of Governors. HWC 1/2/26, pp. 237-38.

[702]"Report by J. M. Mackintosh, Organiser, Heriot-Watt College" Minutes of Meetings of Governors. HWC 1/2/27, p. 151.

to that effect, accounted for a decrease of 212 students.[703] Concentrating on advanced work combined with rising standard to produce a fall in enrolment of nearly 600 in a single session, 1907-08. This was due to the College closing of classes in Elementary Shorthand and Elementary Geometrical Drawing and transferring them to the School Board, as well as raising the standard of entrance to the first stages of technical and commercial classes.[704]

Though the overall trend was reduction in enrolment, another legacy of SED influence was an increase in the number of day classes. As discussed above, the SED put a high priority on the College developing its day classes, a move that was first met with resistance. However, the SED prevailed and enrolment at day classes steadily rose from a mere 82 in 1895, to 223 during the 1903-04 session, to a total of 256 at the end of the period in 1914. While this still represented a clear minority of students (256 in the day classes in 1914 against 2810 in the evening classes) it remained a significant improvement. Table 7.3 demonstrates the developments in enrolment at day and evening classes at the College.

Table 7.3: Enrolment at Heriot-Watt College

Year	Day Classes	Evening Classes	Total
1895	82	3231	3313
1897	122	3511	3633
1899	141	3865	4006
1900	157	3886	4043
1902	174	3904	4078
1904	223	3953	4176
1906	182	3539	3721
1908	169	3040	3209
1910	231	2866	3097
1912	260	2937	3197
1914	256	2810	3066

(Year represents closing year of session, e.g. 1904 is for 1903-04 session. Source: Minutes/Calendars)

This improvement of the enrolment in day classes was in turn attributable to the final legacy of SED involvement: closer co-operation with the University of Edinburgh. As mentioned earlier, the College's interest in co-operation with the University pre-dated the entrance of the SED in College affairs. However, it was not until the SED became involved with its strong policy of closer relations between the two institutions that it really took form, and became a success. In addition, the relationship flourished throughout the period and after. For example, as mentioned

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[703]"Report of the Work of the Session 1904-05" Minutes of Meetings of Governors. HWC 1/2/19, p. 124.

[704]"Report by the Principal on the Work of Heriot-Watt College, Session 1907-08" Minutes of Meetings of Governors. HWC 1/2/22, pp. 177-78.

above, in 1912 the new scheme was completed for widening the degree in Engineering at the University.[705] During the 1906-07 session the joint program in Engineering saw 22 students from Heriot-Watt attending Prof. Beare's classes at the University, and 22 University students in classes at the College.[706] By the 1912-13 session the growth of enrolment at day classes had reached 282, with most of that growth being attributed to closer connections with the University.[707]

In retrospect it seems easy to conclude that the College benefited substantially by becoming a Central Institution, and from the effect of SED policy. Although there was a loss of autonomy, the benefits seem to outweigh any loss of control that occurred. However, not all institutions at the time perceived the potential benefits of becoming a Central Institution and coming under the review of the SED. The next section examines just such a case.

Part IV: The Incorporated Weaving, Dyeing, & Printing College of Glasgow: An Institution Rejecting the SED's Overtures.

As illustrated by the case of Heriot-Watt College not all Scottish educational establishments in this category graciously embraced the chance to become part of the SED's scheme for Central Institutions. Indeed, some chose to stay outside the reach of the SED all together. Giving up control of their courses etc. in exchange for a monetary grant did not prove compelling. This was especially true if a municipality or some other source was providing funding. Such was the case of the Incorporated Weaving, Dyeing, & Printing College of Glasgow.

In the wake of the new Continuation Code in 1901 the College's Secretary James McDonald entered into discussions with Craik regarding the College's classes coming under the Code. Coincidentally McDonald at the same time contacted Laurie at Heriot-Watt to discuss his experience with the SED. More importantly he asked Laurie about the rumoured problems Heriot-Watt was having since coming under the Code.[708] Laurie brushed aside the rumours and reports of trouble and encouraged McDonald to obtain recognition from the SED. Laurie emphasised that the College

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[705]"Report by the Principal on the Work of the Heriot-Watt College, Session 1911-12" Minutes of Meetings of Governors. HWC 1/2/26, p. 212. See also. "Report by the Principal, Session 1912-13" HWC 1/2/27, p. 250.

[706]"Report by the Principal on the Work of the Heriot-Watt College, Session 1906-07" Minutes of Meetings of Governors. HWC 1/2/21, p. 176.

[707]"Report by the Principal on the Work of the Heriot-Watt College, Session 1912-13" Minutes of Meetings of Governors. HWC 1/2/27, p.249. See similar report in "Report of Principal, Session 1913-14" HWC 1/2/28, p. 202.

[708]Private Letter contained within the file of the "Report by the Secretary of the I.W.D.P.C. of Glasgow to the Governors on the Scotch Education Department Code of Regulations for Continuation Classes". 1902. G. 73.

should do so not simply for the steady income that the grant would bring, but also because SED recognition would lend prestige to the classes.[709]

Craik also responded to McDonald's enquiries in a positive manner. Yet the reassurance of Laurie and the positive response from the SED Secretary was not enough for McDonald. He remained unimpressed and unpersuaded that SED recognition was the best avenue for his college. In his report to the Governors he recommends that the College not seek recognition of its courses under the Continuation Class Code.[710] McDonald's objections are wide and varied, but the central premise to all of them was the loss of autonomy to the SED, and the heavy burden of complying with the Code. In McDonald's opinion the only apparent immediate advantage was monetary.

For the Secretary one of the main draw backs was the loss of complete control in assessing teacher's qualifications and talents. His objection to Departmental oversight on this issue reveals the unease that educators in Scotland often had with the bureaucrats of Dover House. For McDonald it did not matter how highly educated a teacher might be, nor what experience he might possess. In the end no matter how good the prospect looked on paper he may be "destitute of the faculty of imparting instruction to pupils."[711] From this arose the continued necessity of responsible managers actually in the school to retain full control over the appointment of teachers.

The subject of regular inspection by SED appointed inspectors also rankled McDonald. His objections to this revealed not only an unease with the educationalists of the government, but also a distinct contempt. He told the Governors:[712]

> Some of the recent fads, for they can be called nothing else, of local inspectors, have been condemned by the most experienced members of the teaching profession in Glasgow.

It was also pointed out that while the SED openly called for greater support for technical education it had not yet trained or appointed any inspectors specially trained in technical subjects. The grant itself was seen to be of little solace in the face of such drawbacks. Much like Heriot-Watt with its trust the IWDPCG had outside monetary support from the municipality, but unlike Heriot-Watt it was not forecasting a deficit. All of Laurie's and Craik's reassuring words of other intangible benefits had little effect. McDonald did admit there may be a certain amount of status derived from the

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[709]Ibid. pp. 7-8.
[710]Ibid. pp. 9-18.
[711]Ibid. p. 14.
[712]Ibid. p. 17.

mere fact of recognition, but he dismissed Laurie's other assurances of indirect benefits. He said:[713]

> The Principal of Heriot-Watt College indicates that there are advantages over and above the grants but he does not specify what they are-and if they are so illusory as to be incapable of specification they cannot be very substantial.

McDonald's final comments were reserved for the central government. He noted the advantage for Scottish education of a central governmental department commanding the best brains of the country, directing each branch of instruction, and undertaking full financial responsibility. Unfortunately that comprehensive scheme did not yet exist. Without it the IWDPCG preferred to stay on its own.[714]

Part V: The Glasgow & West of Scotland Technical College

1. Background to SED Involvement

In the first decade of the 20th century the Glasgow & West of Scotland Technical College (GWSTC) moved firmly towards encouraging systematic study in a diploma course, and most importantly for this study a clear connection between Continuation Classes and the diploma programs of the Technical College. The GWSTC offered diplomas in a wider range of topics that Heriot-Watt. In 1895 its diplomas could be gained in 11 courses including: Civil, Mechanical, Mining, Electrical, and Chemical Engineering, Metallurgy, and Chemistry.[715] However, the number of students actually embarking on such a diploma course was very small, and smaller still were those that actually finished. For example, in 1896 of 251 students in the day classes and 3,076 in the evening classes, only 73 were undertaking a diploma. Of those 48 were in their first year, and only 6 remained on to finish the third year of the course. This actually represented a decrease in numbers completing their third year from 9 in the '95-'96 session, and 11 the previous year.[716]

This was not unusual for such institutions as a group, particularly with regards to evening Continuation Classes. It was widely perceived that these students gained little that could be transferred to the marketplace if they did not engage in some type of systematic course of study. In addition regularity of attendance was generally poor, and, as shown by the statistics above, few stayed on for a sustained period of years.

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[713]Ibid. p. 15

[714]Ibid.

[715]Calendar. Glasgow West of Scotland Technical College. Session 1895-1896. E 10/1/9. (It should be noted that to solidify the work in technical and industrial topics the GWSTC dropped its course and diploma in Agriculture during the 1900-01 session because new Agricultural College then existed.)

[716]GWSTC Annual Report. Presented to the 11th Annual Meeting of the Governors, Feb. 1st, 1898. G 28/8/3.

In the Continuation Classes the situation was worse as students would often go several sessions between taking classes.

One strategy that the College employed to try to persuade students, particularly the vast majority who were in evening Continuation Classes, to stay on for a full course of study was the adoption of Trade Certificates. The special minute under Article 87 of the Continuation Class Code would later require the College to develop its trade classes. However, the GWSTC had a longer history of such classes than Heriot-Watt. The idea of incorporating certificates with these classes was first brought up by a sub-committee of 'masters' and 'operatives' in related classes. They proposed awarding certificates in trades related classes such as carriage-building, wood-carving, metal work, and lithographic printing.[717] The Committee on Teaching and Staff unanimously agreed that certificates of this type awarded to students who had passed a sufficient course of instruction and examination would be beneficial to the related trades in general, as well as encouraging regular and sustained attendance. Shortly thereafter the governors of the GWSTC gave it their stamp of approval.[718]

The certificates covered a wide range of topics that had previously been taught simply as individual classes or loosely connected groups of classes. In addition to the ones mentioned above a large number of subjects in art and modelling, decoration, and painting were included.[719] However, classes that did not lend themselves to some sort of continuous course of study, such as bees and bee-keeping, were not eliminated altogether. Thus, some "trade certificates" would have been more aptly called "class certificates."

Conducted by the Department of Industrial Arts the certificates were either awarded directly by the College or by the Science and Art Department. In either case they did not demand a general education in any sense, but rather concentrated solely on the practical and technical requirements of the trade. Many had a heavy concentration on drawing and the geometrical necessities of the trade, and almost all required hands-on training in a workshop. Each certificate was awarded at either the "elementary" or "advanced" level. The former corresponded to the standards required of an apprentice, and the latter those required of a skilled artisan. In all the College wanted to meet a high level so that employers would recognize them as guarantees of the capabilities of

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[717]"Minutes of the Meeting of the Committee on Teaching and Staff". Minutes of Governors & Committees 1895-95. Apr. 3rd 1895. pp. 13-15. E 1/1.
[718]Ibid.
[719]Calendar. Session 1896-97. E 10 1/1/10.

the holders. Only if this crucial element was achieved would students be persuaded that it was to their benefit to complete a full course of study.[720]

The other strategy employed by the GWSTC to persuade students to undertake a more thorough course of study was a reorganization of its science and technical Continuation Classes beginning in about 1902. Prior to this time the Continuation Classes as GWSTC were simple in an unsophisticated, rather than an efficient manner. Until 1901, with the advent of the new Code, evening Continuation Classes did not have their own prospectus. They were simply listed in the regular college prospectus. During these years the stated objective of the classes was to impart instruction that would enable the student to apply sound academic principles to the performance of their day to day work. This was a more practical outlook than other institutions which still incorporated a good deal of general and elementary instruction in their Continuation Classes. Also, the published material strongly recommended that students take it upon themselves to systematise their studies and follow a course that had been drawn up for a certificate.[721]

The GWSTC awarded 'college certificates' of Junior and Senior grade in twelve subjects: Mathematics and Physics, Mechanical Engineering, Naval Architecture, Electrical Engineering, Architecture, Building Construction, Mining, Metallurgy, Agriculture, Chemical Industries, and Textile Industries.[722] That number was reduced to eleven during the 1900-01 session when agriculture was dropped. The Junior Certificate was said to be "within the reach of all apprentices"[723], and the Senior Certificate required greater expertise and instruction. If a pupil hoped to enter the College to pursue a diploma he required a Senior Certificate.

There was also over the years a slow paring down of trade classes to establish a core of the most important and well attended classes. Yet, until 1902 the Continuation Classes at the College remained unsystematized, and were not organised into prescribed courses of study. Nor was there a clear connection between the Continuation Classes and the advanced technical work of the College proper. This state of affairs was all the more surprising and alarming when it is considered that the vast majority of students at the College were enroled in evening Continuation Courses. For example, during the 1899-1900 session there were 1,128 students in day classes, and a total of 5,621 attending evening classes.[724]

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[720]See generally, Calendar. GWSTC. Session 1896-97, E 10 1/10; and Session 1899-1900 E 10 1/13.
[721]Calendar. GWSTC. Session 1896-97, p. 100. E 10/1/10.
[722]Ibid.
[723]Ibid.
[724]Calendar. GWSTC. Session 1899-1900. E 10/1/13.

2. GWSTC and the SED

Despite the college certificates and the College's published encouragement to follow a course of study leading to a certificate few students did so. Most of the evening students were attending one or two classes in an uncoordinated fashion; often leaving one or several sessions between attendances. Furthermore, many of the certificates were awarded not for the completion of a systematic course of study, but rather simply for individual classes. In the wake of the new Code of 1901 Craik wrote to the College and expressed his concern over this condition. Also, while there were some "group certificates", there were no proposals for certificates that corresponded to the Honours Certificate of Article 72 of the new Code for students who had completed a systematic group of subjects. Furthermore, Craik related his belief that there was little evidence of students being channelled into groups of related subjects.[725]

This triggered a series of moves to implement the previously mentioned re-organisation of the GWSTC's Continuation Classes. First, during the previous session the College had done away with its two grades of certificates. The former Junior and Senior certificate were replaced by a single certificate that closely resembled the previous senior certificate, and in common with the senior certificate it could be applied towards diploma work.[726]

Second, the Governors of GWSTC took on the issue of the new Continuation Class Code of 1901. In particular the question of special status offered to them by the SED under Article 87, and its regulation of future grants to the College. At the beginning of June of the same year Struthers wrote to the College enclosing a draft of the special minute identical to the one originally presented to the Governors of Heriot-Watt. The only feature absent was the sum of the grant that would be on a fixed basis of 3 to 5 years. As expected, Struthers offered to consider any representation as to the other terms that the Governors might find desirable, and expressed the intention of the SED not to make any sudden changes in the organisation of the Institution.[727]

Somewhat unexpected was the response of the Governors of the College. Unlike the cases of Heriot-Watt and the IWDPC there was no debate over loss of institutional autonomy and control, or sniping at the pitfalls of a non-Scottish educational bureaucracy. Nor was there rankling over the details of the wording or language of the special minute. Rather, the Governors accepted the terms and proposals of the minute during the first sitting to consider the matter. Their only input

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[725]"Minutes of the Meeting of the Teaching & Staff Committee". 2nd July 1902. GWSTC Minutes, 1902. pp. 141-143. E 1/1/9.

[726]See generally, Calendar. GWSTC. Session 1900-1901. E 10/1/14.

[727]See, letter from Struthers to GWSTC included in "Minutes of the Meeting of Governors", Jun. 17th, 1901. GWSTC Minutes of Governors & Committees, 1901-1902. pp. 39-42, p. 41. E 1/1/9.

on the issue came in their reply when the SED was informed that an annual grant of no less than £5,000 was necessary.[728]

The most significant change came in the area of the College Certificates awarded for continuation work. In the academic session following the College accepting the terms of Article 87, and the special status it entailed, the GWSTC made two significant changes to its Continuation Classes. First, the new Continuation Code allowed such classes to be held during the day as well as at night, and in accordance with the Departmental directive to the College to expand such classes[729] the College put some, but not all, of its Continuation Classes on a day taught course basis as well as in the evening. This process continued over the next couple of years, but it only affected the most popular courses, especially those in engineering subjects. Therefore, a student could take a continuation course in electrical engineering leading to the College Certificate either during the day, at night, or in a combination of the two.[730]

However, the day and evening classes were never on par a with each other. A far greater number of classes were offered during the evening session. More significant was the fact that, by and large, the day classes remained the province of the Technical College proper and were directed at students earning a College Diploma; rather than Continuation Classes directed toward a College Certificate. Despite the Departmental policy to expand day Continuation Classes and its mandate under Article 87 for Central Institutions to do so, the enrollment at the day classes of GWSTC actually fell over the years. During the 1902-03 session the College had 652 day students as compared with 4,305 students in evening classes.[731] By the 1904-05 session, despite SED and GWSTC moves, the number of day students had fallen to 530, and evening class numbers had risen to 4,424.[732] Although the numbers in the day classes fluctuated over the years it remained a small proportion of the overall enrollment of the College. For example, during the 1906-07 session day numbers increased slightly to 548, but this represented only 11% of the student population at GWSTC.[733]

The second, arguably more successful step, taken by the College to reorganise their Continuation Classes was a move towards organised, systematized courses of study for the college certificates. This is not to suggest that single classes, unrelated to a course of study, did not continue to exist in the Continuation Classes. Particularly in

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[728]Ibid. pp. 41-42.
[729]Ibid. Clause 8 of Special Minute p. 42.
[730]Calendar. GWSTC. Session 1903-04. E 10/1/16. (Showing statistics for 1902-1903 Session).
[731]Ibid.
[732]Calendar. GWSTC. Session 1905-1906. E 10/1/18. (Showing statistics of the previous session.)
[733]Calendar. GWSTC. Session 1907-1908. E 10/1/20. (Showing statistics of the previous session.)

the evening, classes such as Sanitation, Plumbing, and Bootmaking, remained and drew healthy numbers. Nevertheless, the overall scheme of Continuation Classes was directed at completion of a new wide range of groups of courses to earn a College Certificate. The courses of study were specifically designed to meet the wants of local industries, and designed to occupy four sessions.[734]

Some of the newly organised certificate course entailed only a handful of classes. For example, the certificate in Mathematics and Physics only required the completion of five classes. Others, such as the certificate in Metallurgy, demanded completion of eight.[735] In general, the main difference was the fact that the course groups now embraced classes covering the fundamentals of the field, rather than simply practical classes in the subject. For example, the certificate in Mechanical Engineering required a sound grounding in Mathematics and Geometry, and no fewer than four certificates required a class in Sound, Light, and Heat.[736] This change in class content was in line with Craik's recent complaint and recommendation regarding the course structure for Certificates.

In order to encourage not only completion of certificates, but also the promotion of a higher level of technical education a system was established whereby a student who had completed a College Certificate in the Continuation Classes could continue on to the Technical College and earn a diploma. Holders of the College Certificate had the option of either completing a third year in the day classes, or three "Higher" evening classes in selected topics. The latter included higher level classes such as the second course in Mathematics and Geometry. No matter which avenue the student chose he then had to pass an examination in either a modern language or Latin, and the Final Science Examination.[737]

There are, unfortunately, few statistics available to demonstrate how successful these reforms were. Numbers from the 1904-05 session indicate that the majority of evening students were engaged in classes that made up one of the grouped courses.[738] However, there are no statistics to give insight into how many students actually completed the courses and earned certificates, and how many continued to take one or two classes without undertaking a systematic course of study. Nor is there any evidence as to how many students progressed on to the Technical College and endeavoured to earn a Diploma after completing a College Certificate in the Continuation Classes.

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[734]Calendar. 1902-03. pp. 9-10.
[735]Ibid.
[736]Ibid., pp. 10-12.
[737]Ibid., p. 10.
[738]Calendar. Session 1905-06.

Some success could be inferred by the fact that courses were added throughout the years. A certificate course in Printing and Allied Trades was added to the curriculum during the 1904-05 session, and a Bakery School in the 1906-07 session,[739] but that is not sufficient to claim a full success. The institution of a separate prospectus for Evening Classes was more a sign of the overall changes to the composition of these classes and the overwhelming proportion of students in them, rather than a sign of success in the new programs.[740] Thus, there is little to judge whether the changes actually had their desired effect.

At least several broad conclusion can be drawn from the interaction between the GWSTC and the SED. First, the Governors of the College were much more receptive to the policies and control of the SED than many other similarly situated institutions. This is shown by their willing and quick acceptance of the terms of the minute under Article 87 of the Code of 1901. Also, they were quick to implement strategies to systematise the work of the Continuation Classes, organizing groups of related courses leading to College Certificates. This was also in line with the overall policy of the SED to encourage regular and prolonged attendance in a definitive group of subjects, rather than disparate classes. Finally, the GWSTC provided an incentive for those who had completed a certificate course to continue to a higher level of technical education and receive the Diploma of the College. Once again this was in line with the desire of the SED to see a greater proportion of students in this educational stream to continue on to higher level of technical education.

Second, the SED wanted to see a greater proportion of continuation courses being undertaken during the day, and the GWSTC did institute some Continuation Classes during the day. However, the desire of the SED was clearly ahead of the practicalities of the work lives of the students who attended these classes. The fact that the College moved only a small number to a day programme, and then usually kept an option of attending at night as well, seems to indicate that the leaders of the College understood this fact. Employers were not yet at the point where they would allow their charges time off to pursue studies as did their counterparts in Germany and America. As the statistics quoted above indicate the overwhelming majority of students in these classes attended at night. Most did so after a work day, as inefficient as this may have been. Craik's assertion that technical education would not reach the status it deserved until it gained a foothold in day classes remained ripe.

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[739]Calendar. Session 1904-05, 1906-07.

[740]See generally, Prospectus of Evening Classes. GWSTC. Session 1901-1902. E 10/2/15.

3. Later Years: Further Coordinating And Cooperation

After this, changes were slow and non-monumental at GWSTC. In the 1903-04 session GWSTC followed the cue of Heriot-Watt and adopted an entrance exam. Prior to this time the qualification were very general in nature. In 1901 they were simply stated as: "Students are expected to have gone through a course at least equivalent to that of a Board School, and to possess such knowledge as will enable them to profit by the work of the classes."[741]

The new entrance examination covered all but a few science classes, and covered a variety of topics including arithmetic and geometry. However, the standard was very basic. For example, the geometry examination was said to test "the ability of the student to draw figures accurately."[742] Despite this relatively basic level the exemptions to the examination were quite strenuous. A SED Leaving Certificate in Mathematics would exempt a student, as would a certificate from another school or college showing the candidate had passed a similar exam. A "grandfather clause" was also installed for those who had previously been admitted to GWSTC. Oddly, however, the Merit Certificate was not listed as earning an exemption.[743]

The next several years saw few changes in either the curriculum or composition of the class at GWSTC. Nor was there a noticeable change in the type of student, or his preference for times to attend. However, things changed in 1906 when the institution was clearly divided between the "Continuation School" and the "Technical College", rather than simply having a listing of evening Continuation Classes available at the College.[744] This was basically a cosmetic change. It did not significantly change the work of the College, but appears to have provided a more efficient way of grouping the classes.

The 1906-07 session also saw a significant change in terms of the GWSTC's cooperation with other educational institutions in the area. In that year the college entered into an agreement, approved by the SED, with several other educational authorities. They included: the School Boards of Glasgow, Govan Parish, Maryhill, Cathcart, Shettleston, and Govan Y.M.C.A. Together these authorities published a joint guide to evening classes in science and technology. As a group they formed a "carefully graded and correlated course of study"[745] and a path from a variety of evening continuation schools to the Central Institution. This expanded upon the path

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[741]Ibid., p. 7.
[742]Calendar. 1903-1904.
[743]Ibid.
[744]See generally, "The School Boards of Glasgow, Govan Parish, Maryhill, Cathcart & Shettleston, & Govan Y.M.C.A.; and the GWSTC. Guide to Evening Classes in Science & Technology." Session 1906-07. E 10 2/15.
[745]Ibid., p. 5.

that was available for students in the Continuation Classes at the GWSTC, and was another step to try to enable and encourage students to undertake the higher level of instruction available at the Technical College.

The area of co-operation was somewhat limited though in its scope. Evening students who had obtained satisfactory certificates from any of these continuation schools for courses in Engineering, Engineering Drawing and Building Construction would be admitted to the Technical College without further examination. Continuation courses at the College were further divided between "Preparatory Classes" and "Elementary Technical Classes", that were essential to students who desired to take the advanced classes in Engineering and Building Construction in the Technical College. All engineering students had to attempt the work of the Elementary Technical Classes, or reach a comparable standard in order to attend the Technical College.[746]

In order to try to establish a closer linking of work a joint-committee representing the School Boards and the College met with the SED Secretary and Inspectors to determine a course of action. They agreed to appoint A. M. Galbraith, a GWSTC officer, as Superintendent of the concerned Continuation Classes. It was to be his job to act in much the same manner as the "Organiser" at Heriot-Watt; working with the School Boards to co-ordinate work and insure that the scheme would be carried out efficiently.[747] At the same time there was additional correlation of work. The GWSTC resolved to discontinue preliminary courses in Mathematics, Engineering Drawing, and Building Construction. Instead the instruction in these subjects was to begin at a stage that was more suitable to students who had previously studied them in the Continuation Classes of Board schools.[748]

The practice of entering into co-operative arrangements with school boards continued to prosper. Prior to the next academic session additional area educational authorities had joined the scheme. It expanded to include the School Boards of Eastwood Parish and Neilston Parish. In 1908 H.M.I. Andrews praised the work of the Joint Committee, and Galbraith in particular for the success of the scheme for drawing students from the Continuation Classes to the College. During that session 444 students from Division III classes of authorities represented on the Joint Committee satisfied the requirements to be exempted from the College entrance examination. Of this number, 360, or 80%, went on to enrol at the College.[749]

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[746]Ibid., p. 5 & 16.
[747]"Glasgow and West of Scotland Technical College, Report; Section VI." PP 1906 XXXI, pp. 786-799, p. 788.
[748]Ibid.
[749]"Report on Continuation Classes, Western Division, 1908" HMI Andrews pp. 24-25

This also is similar to the progress of Heriot-Watt. Thus, in many ways the progress of GWSTC[750] followed much the same path as Heriot-Watt. This reflects the co-ordinated influence of Article 87 and the SED generally. While the two institutions did not become "mirror images" of each other, it is evident that SED policy had its desired effect.

Part VI: The Case of The Glasgow Athenæum Commercial College; The Failure of Cooperation.

At the turn of the century the Glasgow Athenæum (later the Glasgow and West of Scotland Commercial College) already held a prominent position in the city and the west of Scotland as an institution specialising in mercantile studies and commercial education. Though smaller and embracing a more narrow curriculum, it witnessed many changes and reforms that were similar to those of Heriot-Watt and the GWSTC. To many it was seen as a perfect "sister college" for the GWSTC; one specialising in technical education and the other in commercial, both serving Scotland's most populous area.

Recognized by the SED as a "Central Institution" the Athenæum was brought under the control of Article 87 of the new Continuation Class Code in 1903[751]. Its coming under the control of the SED was not a major issue, though the reason for the two year delay is not entirely clear. A question of the deduction of fees from annual operating costs of the institution was disputed at the time, but was a minor issue.[752] The most probable explanation is the financial trouble in which the institution found itself in the early years of the century. Saddled with debt the College had to make several appeals for funds and overtures to the Government in the years 1901 and 1902.[753] Inefficiently operated, the SED first demanded changes in the College's Constitution, and finally a brand new one, before it could perform any type of oversight.[754] By the summer of 1903 the Governors of the Athenæum had accepted the Minute and enjoyed the same special status as other Central Institutions.[755]

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[750]The GWSTC was renamed the Royal College of Technology in 1912 and was formally affiliated to Glasgow University in 1913. Details in the annual Calendars of the college.

[751]It was in July of 1903 after accepting status under Article 87 that it was appointed to be the "Commercial College for Glasgow and the West of Scotland", although it continued to be referred to, informally and in reports, as the Glasgow Athenæum Commercial College.

[752]Letter from Lauder [Secretary & Manager of the Athenæum] to Craik. Jan. 21st, 1903. ED 26/301.

[753]See generally, "Statement In Connection with Appeal For Funds" Nov. 20, 1902. Letters from Lauder to Craik. Nov. 20, 1902; and accompanying notes by SED officials. ED 26/301.

[754]See generally, Letters from Lauder to Craik dated Dec. 3, 1902; Dec. 16, 1902; and Dec. 22, 1902. Accompanying notes by SED officials and the New Constitution. ED 26/301.

[755]"Special Minute under Article 87 of the Code." H1/9/2

The Glasgow Athenæum also followed the same pattern as the other Central Institution in restructuring its curriculum and classes in a manner that would encourage more efficient study. It was written in 1901:[756]

> The most important of these changes is in the organisation of a systematic Course of Commercial Education, and they would urge upon Students the desirability of their taking the complete Curriculum, and venture to hope that Employers will encourage their Clerks and others to take advantage of the important facilities thus offered them.

Similar to other such institutions most of its classes were taught at night, and the vast majority of students took the classes in combination with work. Yet, as one of the Central Institutions the Athenæum was in a unique position. Though it was governed by the Continuation Code it also offered the highest level of instruction in commercial subjects. Universities as a rule in Scotland did not teach such subjects. Therefore, technically speaking it was providing continuation education, but practically it was providing a more specialised instruction than generally recognised in many continuation schools. In this sense it was somewhere between a continuation school and a commercial university. It had no Division I Courses, and after the reorganisation of the curriculum it had only one course of study spanning over four years; although students showing proficiency up to a certain stage could shorten the course. It comprised up to three years work in a modern language; two years of Commercial Arithmetic, English, Book-keeping, and Shorthand. In addition, to this there were a number of classes existing on their own such as Political Economy and Mercantile Law.[757]

The option remained for students to select individual classes at the own convenience to suit their requirements. It would appear that most opted for this method of study, rather than engaging in the "systematic course of commercial education." Two years later the numbers taking the new course remained low. The College council took the position that all that was needed was time for the benefits of the course to be better understood. Once this had occurred there was no doubt that students would avail themselves of the opportunity to secure this more thorough training for a mercantile career.[758] Others, however, pointed out the long-standing lack of support and encouragement by business which was often lamented by other Central Institutions and continuation schools. (In this regard it is interesting to keep in

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[756]Calendar. The Glasgow Athenæum, 1901-1902. H2/4/1. p. 62.
[757]Ibid., p. 63
[758]"Glasgow Athenæum Commercial College." PP 1905 XXIX, pp. 920-22, 921.

mind the opinions of businessmen as expressed to the Edinburgh & Leith Chamber of Commerce discussed in Chapter 3.) It was written in 1905:[759]

> Much might be done by employers encouraging their employees of both sexes thus to fit themselves for business life, and while a few firms already recognise the importance of such a training, it is hoped that many who may not at present do so, will come to see its value both to themselves and their employees.

Undoubtedly many of the students did not take the full course, and instead opted to engage in only a smattering of courses. The fact that the College curriculum underwent a further reorganization prior to the 1907-1908 session may offer evidence of this. During that session the College introduced a wider range of courses, each one tailored to a particular profession or related professions. Instead of the one all encompassing four year course there were now five courses extending over three years.[760] In many cases as well as making the course more specialised the College also made it less demanding. For example, Course I did not require the study of a foreign language, and necessitated the taking of only two courses in the first year. Even so, this and the previous efforts at systematising the curriculum showed that the College was in step with SED policy and the reforms of other Central Institutions.[761]

However, the one area of SED policy that the Athenæum was not able to embrace for many years was that of developing co-operative relationships with other educational entities, and it is for this reason that the Athenæum requires attention. Throughout the years that Heriot-Watt and the GWSTC were developing partnerships with area school boards, the Athenæum had none. In addition, unsuccessful attempts were made later in the period. For example, in 1908 the College had a conference with representatives of area school boards including Glasgow and Govan Parish. The participants recognized that there was no link between the Continuation Classes of the School Boards and the work of the College, but they also stipulated that there were many difficulties to developing such a link. The only outcome from the conference was a request to the SED to appoint and finance an official to compare and try to co-ordinate the classes.[762]

Shortly thereafter a Joint Committee on Co-ordination rejected the idea of an appointed official to oversee co-operation, even though the SED had approved of the

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[759]Ibid.

[760]Course I-Shorthand Clerks, Typists, etc.; Course II-Shipping Clerks, Invoice Clerks, etc.; Course III-Book-keepers; Course IV-Cashiers, Secretaries, Accountants; Course V-Foreign Correspondents.

[761]Prospectus. The Glasgow Athenæum Commercial College. Session 1907-1908. H2/4/4. pp. 7-8.

[762]Letter from Forsyth, S. [Clerk to the College] to the SED. Feb. 14, 1908; relating proceedings and request. Accompanying handwritten notes by SED. ED 26/301

scheme. A stand-off ensued. Both sides felt that their work was mutually exclusive. The School Boards believed that only minor overlapping occurred, and this situation was necessary to allow students who could not afford the higher fees at the College. The College in turn felt their students were of a higher calibre than those found in School Board classes, and as such no threat was posed.[763] The only coordination that was discussed with any degree of certainty was the College taking over the Senior Classes of the School Boards. However, the Boards insisted that if the College was to do so then the same fees must be charged. If this crucial condition was not met the School Boards were not interested in further co-operation.[764]

There had been little or no discussion of developing methods to encourage students from the Board Schools to continue with more advanced studies at the College. Nor was there consideration of allowing work of the Board Continuation Classes count toward that of the College Diploma. Both of these avenues for co-operation and efficient coordination had been successful in the past at other institutions. For example, they were developed between the GWSTC and a wide variety of School Boards. By the the summer of 1908 any chance of further developments was slim. H.M.I. Andrew stated in a special minute to the SED, "There is little prospect in the near future of any real co-ordination of the work of the Athenæum Commercial College with that done by the School Boards."[765]

The breakthrough came a full three years later when College officials called a conference at the Athenæum in May 1911. This time they contacted a wider range of participants, including representatives of School Boards and County Councils. A scheme was successfully adopted for commercial education in the West of Scotland. It was held that the scheme should "before long secure the harmonious unification of all this [commercial] work."[766] These efforts received a further boost when George Laidlaw was appointed Director of Commercial Studies at the Athenæum. Part of his job was to arrange for the affiliation of Commercial courses under the different School Boards with the College.

Why did attempts at co-ordinating the work of the Commercial College and the Continuation Classes of the School Boards fail for so long, when it prospered in the case of other Central Institutions such as Heriot-Watt and GWSTC. Both were, in the traditional sense, undertaking continuation education; though the Athenæum was of a

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[763]Report of the Joint-Committee on the Co-ordination of Work" May 12, 1908. ED 26/301.
[764]Ibid. See also, Letter from Forsyth to SED accompanying Report. ED 26/301.
[765]"Continuation Classes, Commercial Course." Copy of a Minute by A. R. Andrew, Jun. 20, 1908. ED 26/301.
[766]"Report for 1911 on Continuation Classes" Fraser, p. 40.

more specific nature. Some of the course were indeed similar if not identical. Courses in Shorthand, Book-keeping, and modern languages were certainly common to both.

At the May conference the representatives of the School Boards said that co-ordination was difficult because many students would not have the ability to travel to the College or pay its fees. This reasoning holds little weight as many of the same School Boards (Glasgow and Govan Parish in particular) had co-ordinated their technical and science work with the GWSTC. Equally so, the College's excuse that if it were to take over the Senior Classes of the School Boards at identical fees it would run a deficit does not stand up. Under the provisions of Article 87 of the Code the SED grant was based on annual operational costs minus fees. Therefore, lower fees would have been offset by a larger grant.

Is there then an explanation? The failure of the Central Commercial Institution and the regional School Boards to reach a consensus on the co-ordination of commercial education seems to be symptomatic of the state of commercial education in Scotland as a whole. There was a lack of commercial education being taken up by the various School Boards in a serious and systematic manner. School Boards tended to offer a variety of single courses, rather than a full course of commercial study that would lead to the higher levels available at the College. Also, there was little enthusiasm for commercial education in many quarters, and commercial education was conducted in a sporadic and haphazard manner with little direction from the SED. Many of the same currents in society that doomed the Commercial Leaving Certificate underlined this situation as well.

Indeed, there may not be a clear explanation at all. The fact remains that it was not until the end of 1910 that the subject was broached again by the Athenæum, and there was an attempt to engage the concerned parties in discussion of the subject.[767] Even then there was little progress for another year, problems of co-ordination with neighbouring school boards seemed insurmountable.[768] In fact after years of encouraging such participation, the SED was so frustrated in the wake of the 1908 Act that they made public a policy of greater association. In 1909 the SED stated:[769]

> properly the work of these courses [Div. III] should be affiliated to that of one or other of the Central Institutions...the important object being that the work of these courses should be conducted on such lines as would enable the student...to enter with profit upon the more advanced work carried on at these institutions.

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[767]SED Un-numbered Minute Paper. Nov. 2, 1910. ED 26/301.
[768]"CCES Report for 1909-1910." PP 1910 XXVI, p. 23.
[769]"CCES Report for the Year 1909-1910." p. 20.

The eventual co-operation and co-ordination was more properly attributed to the more secure position of Continuation Classes in 1911. With increased enrolments generally, more students in Division III classes, and increased enthusiasm from Boards to co-operate with Central Institutions, the Boards were in a better position to advance students to the work of the College. Thus, it is evident that these two sectors of Scottish education were not only became mutually dependent to some degree, but also materially effected each other.

Part VII: Conclusions

Several broad conclusions can be made regarding the SED's role in the development and progress of Central Institutions in Scotland. First and foremost, though some minor institutions either failed to meet the standard set by the SED for the distinction of "Central Institution", and others opted out of SED oversight and grants, the most important institutions came within the scheme and policy mandates of the SED. Thus, Craik and the SED had the degree of control over this sector of the educational system that it desired. Second, this control had a significant impact on the Central Institutions. Craik had wanted a method to mould the Central Institutions of the country into a system that focused on advanced work, and had a commonality of purpose. The carrot may have been the grants available and some level of prestige that accompanied recognition, but the stick, if it can be termed that, was adhering to a certain number of fundamental SED policies. These included, concentrating on advanced instruction, developing the day side of the institution, instituting and cultivating trade classes, organising classes into courses of study, and working toward schemes of co-operation and co-ordination with the Continuation Classes of the School Boards. By and large the SED succeeded in securing these objectives, and the development of Central Institutions in the years after the 1901 Codes reflected this. More importantly they were developing along similar lines, towards common objectives.

It should not, however, be assumed that these common objects were universally valued or successful. Many individuals felt that the policies of the SED and its bureaucrats were out of touch with the realities of the day, and based on theory rather than practical experience. For example, in 1913 Dyer even voiced his disapproval of laying out courses of study leading to the Central Institutions, and attempting to get all or most of the students to take them. Dyer wrote that it was "absurd to lay out courses of study leading to central institutions and expect the students to take the beginnings of them." He claimed that to do so was to ignore the reality that not more than 7-10% of all the apprentices ever gained "any position of

responsibility where anything like a scientific education will be required." Rather, all that was needed was as good a general education as possible, "with such simple practical applications as they will require in their daily work."[770]

The third conclusion is that by emphasising co-operation and co-ordination between the Central Institutions and School Board Continuation Classes the SED fulfilled two of its central objectives. The Central Institution began to assume the same position and influence toward the Board classes, as the Universities did toward the day and secondary school. Thus, the Central Institution could truly be considered the universities of the working man; the crown on a system leading from the day school, through Continuation Classes, with a natural bridge to the Central Institutions. In this manner, the SED was able to exert some level of control and "system building" over the Continuation Classes of the School Boards; despite the fact that much of the organisation and decision making remained in the hands and discretion of individual School Boards. By taking control of the top of the system the SED was able to influence the bottom, and build a system.

[770]Dyer, Industrial Training, p. 60.

Appendix A: Central Institutions

After the Education (Scotland) Act of 1908 the SED re-affirmed that the Central Institutions formed the "crown" of the Continuation Class system. The following were the recognised Central Institutions in the wake of the Education Act (1908-1909). [CCES Report for 1909-10 PP 1910 XXVI, p. 21.]

Aberdeen and North of Scotland College of Agriculture
Aberdeen Gordon's College and Gray's School of Art
Dundee Technical Institute
Edinburgh College of Art
Edinburgh Heriot-Watt College
Glasgow and West of Scotland Technical College
Glasgow Athenæum Commercial College
Glasgow School of Art
Leith Nautical College
The West of Scotland Agricultural College

Appendix B: Article 87 and Related Minute

1. Article 87 of the Continuation Class Code of 1901

87. The Scotch Education Department may from time to time exempt any Technical college, School or Art, or other special institution eligible for grants under this Code from the operations thereof, and may substitute therefore, with the consent of the Treasury, a special Minute embodying the conditions of grants to each such College, School, or Institution so exempted.
(PP 1901 LVII, p. 18)

2. Text of the Special Minute under Article 87 of the Code of 1901

NOTE: This is the text of the conditions listed in the draft minute as accepted by the GWSTC. It is identical to the one originally given to Heriot-Watt before minor amendments were made. It is also the minute given to the IWDPC for their consideration.

1. That the scheme of work of the College as a whole shall be annually submitted to and approved by the Department.

2. That the qualifications of all lecturers and teachers who may be hereafter appointed shall be submitted to the Department for approval.

3. That the Governors shall, annually, submit to the Department a report on the work of the College for the preceding year, and shall, further, make to the Department a return of such particulars relating to the College as may from time to time be called for.

4. That the accounts of the College shall be audited to the satisfaction of the Department, and an abstract thereof submitted for their information.

5. That the Department may, at such intervals as may be determined, cause an inspection to be made of any department or departments of the College either by officers of the Department of by other suitable persons, and obtain from them a report on the work of the said department or departments.

6. That all diplomas and certificates issued by the College shall be awarded on conditions approved by the Department, who, in the case of any examinations for diplomas recognised by the Department for any purpose, may require the appointment by the Governors of an assessor approved by the Department to act along with the Professors or Lecturers of the College in conducting the examination.

7. That the Governors shall, from time to time, make regulations to be approved by the Department as to the qualifications to be required of students for admission to the College, or to any class thereof, and shall show to the satisfaction of the Department r its officers that the approved conditions of admission are being observed.

8. That the efforts of the Governors shall be directed in the first place to strengthening and enlarging the Day Department of the College for the study of various branches of applied science, and to making such provision of trade classes wither in the day or evening as the circumstances of the district may seem to require.

9. That no classes in subjects other than those of an industrial or technical character shall be established, not classes of an elementary standard maintained in other than the 'Trade' subjects already referred to, without the express sanction of the Department.

10. That there shall be an annual contribution to the funds of the College from sources other than the grant under this minute, but exclusive of income from fees, at least equal to the said grant.

CHAPTER 8: The School and the Health and Welfare of Children

Part I: Introduction

Though the issue of addressing the health and welfare needs of the country through the schools reached a peak during the period surrounding the Boer War (1899-1902)[771], it should not be supposed that this was the first time the issue was discussed. In addition, although the discussion was often poised in terms of the correlation between military requirements and healthy young men,[772] this was not the only motive of those that favoured schools taking an active role in the health and welfare of the nation's children. For example, in 1876 H.M.I. William Jolly wrote of the need for physical training, the teaching of better hygiene, and better sanitation in Scotland's schools.[773] Jolly, however, based his argument not on the needs of the military and war, but rather on the positive effect such developments would have on the general welfare of the nation, especially among the poor. Indeed, while he advocated the use of 'military drill' as a form of physical exercise he viewed as desirable that it be disconnected from actual military service. He wrote: "Military attitudes and movements should not be introduced into common school movements."[774] It is particularly interesting that a school inspector would come to this conclusion, as it was these officials that saw the condition of the schools and the children on a daily basis. Furthermore, inspectors were ideally suited to make a judgement of not only the physical conditions, but also the effect that these conditions had on the educational process.

Jolly expressed similar sentiments to those who would later advocate issues such as medical inspection, physical training, and school sanitation as an element of the National Efficiency movement. For this contingent the improvement of the nation's health was fundamental to providing healthy, physically fit, and efficient workers, as well as raising the general quality of the race. It was also seen as a way of countering the negative effects of the twin evils of urbanization and industrialization. As it was the poor and working class that suffered disproportionately from

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[771]See generally, Thomson, I. "The Origins of Physical Education in State Schools" Scottish Educational Review Vol. 10, 1978, p. 15-16.

[772]See for example, Lockyer, N., "Education and War" in Education and National Progress; Essays and Addresses, 1870-1905. pp.1-4 (London, 1906). Lockyer wrote the essay in 1870 while Europe was embroiled in conflict. The essay noted the necessity of well educated engineer, etc. not only to win wars, but also to win the peace that followed. Lockyer was an astronomer of very much significance, pioneering discovery, and numerous distinctions. Throughout his latter years he was a vocal advocate for greater scientific instruction in British schools, particularly the universities. DNB

[773]See generally, Jolly, W., "Physical Education and Hygiene in Schools" [from a paper read at the British Association, in Glasgow, Sep. 1876] *The Journal of Education*, reprinted in Pamphlets on Education. pp. 1-21 (London, 1876).

[774]Ibid., p. 10.

malnutrition, eye and ear diseases, and other physical defects much, of the attention was directed towards them and their schools. However, it should not be forgotten that there was a very real concern that the general deterioration of Scottish health had spread beyond the traditional confines of the lower classes. Confirmation of this trend came in the report of the Royal Commission on Physical Training in 1902.

During the Boer War and its aftermath the two concepts coalesced to formulate concrete educational policy and action in Scotland. Although the Boer War has often been discounted as little more than "scattered gun imperialism"[775] it came at a time when imperial thought was rife and the military needs of empire actively contemplated. It was determined that the basic military requirement was a core of healthy citizens to meet the challenges that the empire imposed on the country. Lord Rosebery, expressing what has been described as the social-imperialist argument of Liberal-Imperialism at the turn of the century, wrote:[776]

> An Empire such as ours requires as its first condition an imperial race--a race vigorous and industrious and intrepid...in the rookeries and slums which still survive, an imperial race cannot be reared....Remember that where you promote health and arrest disease, where you convert an unhealthy citizen into a healthy one, where you exercise your authority to promote sanitary conditions and suppress those which are the reverse, you in doing your duty are also working for the Empire.

Thus, Rosebery urged action to provide "citizens and subjects of an Imperial race." While the Fabian Bernard Shaw declared the old idea of a standing army obsolete, he also asserted that Great Britain had to have a "well-trained army of fighting civilians, of citizen soldiers." In order to accomplish this he recommended that the Factory Acts be amended to extend the age of half-time employment all the way to twenty-one. The additional hours gained in this way should then be spent in "a combination of physical exercises, technical education, education in civil citizenship...and field training in the use of modern weapons."[777]

The Boer War brought these theories into sharp focus. This was partly because of battlefield performance, which was viewed as approaching bumbling at times and less than perfection throughout. In addition, the threat of Germany grew during the conflict. German press attacks during the Boer War combined with previous events such as the German pounce upon China, the rupture of the Anglo-

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[775]Field, F. H. Toward a Programme of Imperial Life: The British Empire at the Turn of the Century. (Oxford, 1982) p. 19.

[776]Lord Rosebery, Miscellanies: Literary and Historical, II. (London, 1921) pp. 250-51.

[777]Shaw, B. (ed.) Fabianism and the Empire. (London, 1900) pp. 39-41.

German commercial treaty of 1895, and the Naval Law of 1900 to fix the enmity of Germany in the mind of the Scottish public.[778]

However, the greatest impact of the Boer War came with the revelations of the extremely poor physical condition of recruits and volunteers. It was assumed that a certain proportion of military recruits would prove unsuitable for service due to physical impairment. However, the vast numbers of recruits for the Boer conflict that fitted this category shook the authorities. While there are no statistics dealing specifically with Scottish recruits it is informative to look at the numbers for Britain as a whole. Figures varied from area to area, with the worst areas turning away over one-third of all recruits. The army rejected a staggering 69,000. Relatively minor, and easily remedied medical conditions such as poor eyesight and hearing were all to common. Of the 69,000 rejected by the army 4,400 were for bad teeth.[779] However, it was even more disturbing that advanced physical ailments also took their toll. Rickets were shockingly common, as were respiratory related illness. Some recruits were so physically weak generally that they could hardly walk a flight of stairs. The situation was worse in the big cities such as Manchester where 800 out of 1,200 volunteers were rejected on grounds of physical infirmity.[780] While there was a general awareness of poor sanitation and health in the slums and among their inhabitants, such a widespread problem and the danger it poised were cause for genuine national concern.

Part II: The Royal Commission of 1903

Concern over the physical degeneration of Scottish pupils spurred the appointment of a Royal Commission in 1902 to examine a range of associated health and welfare issues. It is significant that the commission in Scotland came prior to its counterpart in England. It can only be postulated whether this was because the conditions existing in Scotland were considered more dire, or in order to see if such a study was profitable generally.

Though part of its warrant was to make recommendations as to how physical training could be improved for the greater welfare of the child, its greatest contribution was to provide a definitive examination of the true condition of not only the physical training available in Scottish schools, but also the state of the pupils health generally. The second point held great significance. As was discussed above there was

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[778]Hoffman, R. J. S. Great Britain and the German Trade Rivalry, 1875-1914. (New York, 1964) pp. 282-83, & 295.
[779]Parl. Deb. 4th ser. Vol. 188. 135.
[780]Scotland, J. The History of Scottish Education: Volume Two: From 1872 to the Present Day. (London, 1969) pp. 6-7.

widespread concern that the physical health of Scottish children was slipping through a combination of factors; chiefly urbanization and industrialization. However, as will be discussed below there had never been anything approaching a comprehensive study of the true physical condition of young Scots. In addition, the newly reformed Continuation Class system provided the Commission with a new avenue to consider. This would receive special attention.

The provision of physical training in the elementary schools of the country varied from school to school and district to district. However, the Commission quite easily reached a consensus that the physical training throughout these schools was generally inadequate both in terms of quantity and quality. For example, on average elementary pupils spent only about half an hour a week engaged in some form of physical exercise. In assessing the reasons for this state of affairs the Commission determined that one of the chief hindrances to the development of physical training in elementary schools was the utter lack of any system and the absence of qualified teachers.[781]

Higher class Schools were found to be generally better organised on the subject and had better provision in terms of playground accommodation and facilities that could be utilized in all weather The Commission noted:[782]

> In several of these schools cadet corps have been established, and in this way military drill and training is given to the older boys. The headmasters of these schools and others have strongly advocated the desirability of having some form of military drill and training as part of the curriculum of every school.

Yet despite this, the general consensus was that for Higher Class Day schools generally the subject of systematic physical training did not receive sufficient attention or recognition. For this group of school the biggest obstacle appeared to be a lack of time owing to the pressure of other subjects demanded by the competitive examinations. Also, while the schools often promoted games the Commission believed that these were not a substitute for 'a systematic course of training.'[783]

Oddly, Industrial and Reformatory schools committed substantially more time and effort to physical training. The Commission revealed that at eighteen out of twenty-three such institutions for boys either free or applied gymnastics were taught, and at the remainder some form of physical training was conducted. At all of the twelve school for girls, instruction was given in physical drill, swimming, dancing and free gymnastics. This level of provision impressed the Commission for two

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[781]"Royal Commission on Physical Training" PP XXX 1903. Report pp. 7-38, 8-9.
[782]Ibid., p.11.
[783]Ibid., p. 12.

reasons. First, it was accomplished in what they described as "very unpromising physical and moral conditions and previous training," and was evidence of what could be done when a system was properly applied and vigorously pursued. Second, and more importantly, the children committed to these institutions were the worst disciplined and least inclined to educational achievement. The consistent provision of, and the positive experience such institutions had with physical exercise demonstrated to the Commission the importance it had in fitting people for a "civil life".[784]

Though the Commission found physical training to be of particular benefit to those children committed to Industrial and Reformatory schools, it also recommended its universal provision. It concluded: "our inquiry has led us to recognise the importance and benefit of physical drill for all children, whether town or country, and we desire to see it constitute an essential part of any system."[785]

As mentioned above one of the greatest contributions of the Royal Commission was to provide definitive statistics regarding the true physical condition of Scottish school children. The Commission pointed out that when it started its investigation there were not reliable statistics for the country despite the fact that the physical degeneration of the Scot was rumoured for years. One of the few scientific and complete studies directly connected to the military, and the only one the Commission noted was undertaken in London. It showed over 30 per cent. of recruits being rejected for physical ailments ranging from defective vision and bad teeth to heart disease.[786] Detailed statistics are found in Table 8.1.

Table 8.1: Results of London Commission on Health of Recruits

Number of Recruits Inspected:	12,292
Rejected	3,908 (31.79%)
Found Fit	8,384 (68.21%)

Most Numerous Causes of Rejection by Percentage of Total

Defective Vision	3.71%
Deafness	1.16
Disease of Heart	1.19
Disease of Veins (Varix)	3.00
Loss or decay of many teeth	2.61
Hernia	1.17
Under Height	2.53
Under Chest measurement	4.93
Under weight	4.88

In short, there was little information that referred directly and distinctly to Scotland and children in Scottish Schools. Only one study submitted as evidence dealt

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[784]Ibid., p. 9.
[785]Ibid.
[786]"Royal Commission" Appendix IV, p. 58 "Extracts from Army Form B. 215, handed in by Lieut.-Col. W.G. Don, M.D., A.M.S." "Annual Return of Recruits enlisted for the Regular Forces, during the Year from 1st January 1901 to 31st December 1901. St. George's Barracks, London."

with Scottish children at all. However, it compared only 1,600 Scottish children with other nationalities, was conducted amongst children attending school in England, and was deemed unrepresentative of children in the schools of Scotland.

As a result the Commission ordered an investigation in Scotland to obtain reliable statistics. After confronting difficulties of time, expense, and co-operation it was decided that the investigation be limited to two cities: Edinburgh and Aberdeen. In addition, in order to make even this limited investigation manageable a cross-section thought to be representative of all types of schools (poor, affluent, urban, suburban, etc.) and ages of children was undertaken. Thus, in each of the towns 100 boys and 100 girls would be examined in equal numbers in each of three age groups: six to nine, nine to twelve, and twelve to fifteen. In total 1,200 Scottish school children were examined to gather statistics on height, weight, nutrition, mental condition, clothing, disease, deformity, and any other data that could readily be gathered. The investigations were entrusted to one individual in each city: Professor Mathew Hay in Aberdeen, and Dr. Leslie Mackenzie in Edinburgh.[787]

Some of the findings of Dr. Mackenzie and Prof. Hay, while shedding light on previously unproved assumptions, acted to simply confirm suspicions rather than break new ground. For example, they took note of the size and quality of homes students came from. It did not come as much of a surprise when their investigation found that pupils from larger homes (considered to be a good indication of social status) exhibited better health generally than those from smaller ones. In Aberdeen the largest single group, 31.3% of the children, lived in three-roomed houses, while in Edinburgh the predominant number, 35.32%., lived in two-roomed houses. Indeed, of all the Edinburgh children, 45% lived in very small, i.e., one or two-roomed houses. The health ratios in both cities reflected these facts, with children in Edinburgh generally displaying poorer health than those in Aberdeen. For example, in Aberdeen 5% were found to be in "apparent poor health", while in Edinburgh the proportion was 19.17%. Statistics regarding nutrition exhibited similar disparity between the two cities. In Aberdeen 9% of school children were found to be badly nourished while in Edinburgh the figure was 29.83%.[788] The sharp lines between social status and health were also demonstrated within Edinburgh where Mackenzie remarked on the sharp divide between the health of pupils at Bruntsfield and North Canongate (the best and the worst schools examined in Edinburgh).[789]

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[787]"Royal Commission Report" pp. 22-23.
[788]Ibid., p. 24.
[789]Ibid.

While this evidence portrayed pupil health as divided along class lines in Scotland, wider evidence portrayed the health of Scottish school children as worse generally when compared with statistics from other countries and the averages for Great Britain as a whole. For example, when comparing the height of Edinburgh and Aberdeen children with those from a similar study in Boston (U.S.A.) the children were shorter in each one of the three above mentioned age groups. The statistics regarding weight were not much more encouraging. Only Aberdeen boys between the ages of 6-9 were on average heavier than their Bostonian counterparts. In turn, those in Edinburgh were consistently shorter and lighter than pupils in Aberdeen.[790]

The comparisons with the whole of Great Britain were based on comparisons with the statistics of the "Final Report of the Anthropocentric Committee of the British Association of 1882-1883". In this comparison Edinburgh boys and girls were again shorter and lighter than the British average in each and every age grouping. Aberdeen did not fare as badly. Boys and girls from the ages of 6-9 were close to or above the national average. However, as the children grew older the Aberdeen sample fell behind. Both boys and girls from the ages of 9-15 were consistently shorter than the national average; though not so much so as the pupils in Edinburgh. The picture that emerged was much the same with regards to weight. Both boys and girls from Aberdeen were actually heavier than the national average up to the age of 9 years. However, after that age weight began to fall. Only the boys between 12 and 15 years met or exceeded the national average. Boys and girls between 9-12, and girls between 12-15 all failed to meet the average weight for the nation as a whole. Though, again, they were consistently heavier than the Edinburgh pupils.[791]

This weak comparison with the pupils of other countries and Great Britain generally was what was most disturbing. While it was long suspected that poorer Scottish children suffered from worst health than their more affluent counterparts, the general deficiency of the country was not known. It also held the greatest consequences for the international military and industrial competition of the country.

There was, however, more bad news. The statistics below detail the alarmingly high rate of many illnesses and physical defects among the pupils surveyed. This was especially true among Edinburgh students where over half suffered from a disease of the nose or throat. In turn, one-half of the cases of throat disease were naso-pharyngeal adenoids, which impeded physical development, retarded growth, and led to deafness and ear disease. The startling number of pupils that suffered from some form of eye or ear disease was particularly worrisome for

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[790]Ibid., p. 25.
[791]Ibid.

these diseases directly impaired the child's ability to perform good work (either mental or physical) in school. Also, Dr. Warner's examination showed a worrying comparison with English schools. In schools south of the border only 2.92% suffered from "Diseases of the eyes and eyelids".[792]

Table 8.2: Occurrence of Ailments in Hay/Mackenzie Study[793]

	Percentages	
	Aberdeen	Edinburgh
Diseased Glands (mostly tubercular)	2.0	18.50
Nose and Throat Disease	30.0	52.54
Lung Disease	1.8	3.00
Heart Disease	1.0	4.33
Bone Disease	3.0	2.17
Joint Disease	0.2	0.17
Disease of refraction of the eyes	23.9	31.67
Diseases of eyes and eyelids	12.2	15.50
Diseases of ears causing defective Hearing	14.0	42.04

The Commission commented:[794]

> No great amount of argument is required to bring home to everyone the significance of such facts as these. Height, weight, pallor, bad health, bad nutrition, want of alertness, and bad carriage, besides other conditions not noticed here but dealt with in the reports, distinguish Edinburgh adversely throughout as compared with Aberdeen, and even Aberdeen, which probably is fairly representative of Scotland generally, as compared with the standard of the British Islands, leaves something to be desired.

The conclusion of the Royal Commission was inevitable. Their report provided strong factual evidence to a trend that was long suspected. The members of the Commission reported that "there exists in Scotland an undeniable degeneration of individuals...which calls for attention and amelioration in obvious ways, one of which is a well-regulated system of physical training."[795] The evidence served as grounds for promoting greater physical training in schools, but more importantly it was considered convincing proof that provision should be made for regular Medical Inspection.[796]

Given this glaring deficiency the Commission next turned to possible remedies and means of encouraging physical training. Some proposals such as a special grant were discussed, but were summarily dismissed. In the case of the special grant it was

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[792]Ibid., p. 27.
[793]Ibid., pp. 26-27.
[794]Ibid., p. 25.
[795]Ibid., p. 27.
[796]Ibid., p. 28.

noted that to provide one for physical instruction would mean diminishing some other item.[797] Yet the teachers who came before the Commission repeatedly gave evidence that the real objection to increasing time for physical instruction lay in the excessive demands of the Code. The Committee believed that the Code did not prevent allotting time for physical training, and that the real problem arose from the "prevalence of long-continued habit and antiquated views on the part of school authorities, teachers, and parents." While they found in witnesses a perfect readiness to admit the importance of physical training, they equally found they had accustomed themselves to think of it as deserving nothing more than an infinitesimal portion of school time.[798]

The Commission believed that former Codes, which regulated payments by the number of subjects taught had developed a habit of mind that had not disappeared despite the change in the Code. As a result teachers were accustomed to measuring their own success by the catalogue of subjects which they could take up. There existed a similar problem on the part of parents. Until the Act of 1901 exemptions could be gained as early as 10 years of age provided that the fifth standard had been passed. Parents had come to view school as a process of gaining this exemption as quickly and as early as possible, and to regard only the work that assisted in this endeavour to be important.

The Commission proposed that the real remedy and challenge was in having both school and home recognize and appreciate the 'wider aims of education' in the modern era. For them it was unquestionable that a new conception of education had to be formed. Echoing the National Efficiency movement it wrote:[799]

> The normal school career of every child is nine years. This is ample for any ordinary elementary training, and there must be something essentially wrong with our educational system if it cannot, as a general rule, give a fair mental and physical training within that time to any average boy or girl ...The real educational problem is, not how many subjects can be pressed into a curriculum, but how the nine available years can be best spent, so that no essential part of the equipment for life is entirely overlooked.

The Commission's position with regards to elementary schools reflected this belief that physical education played an intricate role in the development of the citizen. In the better class of Elementary Schools inadequate provision did not present a problem, as the children were usually well looked after at home. This was not, however, the case with the poorer schools, or with the majority of scholars. While the poorer schools had the fewest advantages as regards 'physical training and recreation

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[797]Ibid., p. 15-16.
[798]Ibid., p. 16.
[799]Ibid., p.17.

opportunities', it was for these schools that an elastic curriculum was essential. For these schools the recreative part of education was deemed to be as valuable as "anything of the nature of book work or brain work, and should bear a proportion to the rest of school life quite different from that hitherto assigned to it."[800]

The Commission recommended that at least two hours per week be devoted to physical training in every school in the country, and school authorities should be at liberty to assign a higher proportion of time. The assumption was that the managers of schools in poorer localities might want to devote more time to physical training to compensate for shortcomings of the home environment not present at the more affluent school.

The question of accommodation for physical exercise remained a vexing one, and returned to the proposed 'new conception' of education. While some of the elementary schools could boast classrooms of as good a quality, or better, than those of Higher Class Schools, few could do the same with regards to accommodation for physical and recreative training. It was pointed out that a Higher Class School would not last a year without an ample playground. Yet the Commission believed that School Boards thought that they have done all that was required for the Elementary Schools if, along with adequate school rooms, they provided "a small paved yard in which children can get an occasional breath of fresh air, but where games are entirely out of the question."[801] In contrast it was not uncommon for the Higher Class School to have the use of fields of some acres in extent. The new conception of education dictated that gymnasia, playgrounds, and the like should receive as much attention at the elementary school as the teaching room.

The issue of continuation schools presented a different set of issues. The Commission firmly believed that despite calls that grants should be dependent upon an adequate amount of physical training in continuation schools, such a move would be widely resented by the students and would seriously interfere with the usefulness of the classes. However, the Commission did assert that it would be reasonable to require all groups of Continuation Classes recognised by the SED to provide adequate opportunities for physical training for those students who desired to avail themselves of such opportunities. Furthermore, they wanted to require those pupils on whose account grant was claimed under Division I. Code to either take part in the physical training available at the continuation school, or to produce a certificate of sufficient previous training adequate to their age and strength.[802]

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[800]Ibid., p. 18.
[801]Ibid., p. 18.
[802]Ibid., p. 20.

The Commission's discussion and recommendation with regards to physical training generally, but especially with regards to Continuation Classes, revealed that the issues were much broader, and were firmly entrenched in the ideals of National Efficiency. Henderson testified before the Commission that it was his observation after 20 years as an employer in jute manufacturing that there was a real need for a system of compulsory physical training in schools to the age of 14.[803] More importantly, it was seen as a method and tool to create the "Imperial Race" to which Rosebery had referred. For example, it was pointed out that provision of these facilities did not carry the same expense as laboratories and classrooms, and thus fit into the concept of efficiency. In addition, it was suggested that the change of occupation afforded by physical training would "greatly relieve the drudgery of the teacher's work, and would give them that elasticity of mind which is essential to the best efficiency."[804] It would also have a positive effect for the pupil, above and beyond the betterment of his physical condition. The Commission postulated:[805]

> The school would enter more largely into the child's life and would assist to make up for any defects in home training. There might be less book work done from day to day, but we are convinced that the result of such a system, after a course of years, would give better intellectual results, while the moral and physical aspects of education, which are now pushed aside, would be advanced by such a process.

In the debate over creating a new view of education and recognising its wider aims the Industrial and Reformatory schools were recognised as being closer in many ways to the proper attitude. At these schools it had never been the mission to pass a certain standard by a certain age, nor had it ever has been the aim of the pupils in those schools. Rather, the whole effort of the staff was necessarily directed to one aim: to turn neglected children, who often had already entered on a career of crime, into "sound and respectable citizens, with mind and body so trained as to enable them to start life on favourable terms."[806]

More importantly physical training was seen as an effective weapon against youth vagrancy and delinquency. The Commission assumed that those ill-disposed to such training were young people without satisfactory home influences, who would "contract a love of loafing about the streets...and prefer the attractions of a street corner or the shelter of a railway arch."[807] In dealing with this class of youth the Commission took solace in the fact that physical training had apparently had such a

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[803]Ibid., Testimony, p. 573.
[804]Ibid., p. 19.
[805]Ibid.
[806]Ibid., p. 17.
[807]Ibid., p.20.

positive effect upon pupils of Industrial and Reformatory schools. For what was desired was a method of dealing with the youth before he became a criminal.

It was noted that the English Vagrancy Act of 1824, of which section 4 was amended and made applicable to Scotland by the Prevention of Crimes Act 1871, section 15 provided for prosecution of persons deemed to be rogues and vagabonds, allowing for imprisonment for three months with hard labour. In addition the Glasgow Police Act 1866, section 144 held a similar definition but with the proviso that the accused could prove that he had a fixed place of residence, and a lawful livelihood in the city. Similar to these statutes was the Burgh Police (Scotland) Act, 1892, section 408 which applied to every existing burgh, except Edinburgh, Glasgow, Aberdeen, Dundee, and Greenock.[808] The juvenile loafer had a thin line to cross before his actions could be classified as a crime and punished. What the Commission wanted was a means of dealing with the loafer who has not overstepped this legal line. They sought in physical training a remedy, not a punishment; a scheme at once practicable and economical, available for young persons up to the age of eighteen. Those under 14 years of age who had committed a legal offence, proved themselves confirmed truants, or generally had to be rescued from criminal surroundings could be committed to Industrial Schools.[809] The question the Commission poised was what could be devised for young people between the ages of 14 and 18? The Commission proposed a three prong attack on the problem of loafing, all of which were built upon the Continuation Class in the first instance. First, a Court might be given power to issue a Compulsory Attendance Order at a Continuation Class for a youth deemed to be vagrant or otherwise in danger of falling into the criminal class. In turn each Continuation School would supply the vigorous physical training that had proved successful at the Reformatory and Industrial school for this class of youth. If there was non-compliance the individual could then be committed to an ordinary Reformatory School, or even, in the last resort prison. Finally, the establishment of a "Short Detention School" was recommended. It would bear the same relationship to the Reformatory School as the Truant School did to the ordinary Industrial School, but for older individuals. In other words, if a Compulsory Attendance Order for a Continuation Class was issued and ignored, and the magistrate judged that the individual should not be committed to a Reformatory school he could be committed to

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[808]Ibid. Included in the definition of a rogue or vagabond was: "every person wandering abroad and lodging in any barn or outhouse (etc.)...not having any visible means of subsistence, and not giving a good account of himself or herself."

[809]Industrial Schools were of three types. First, there was the ordinary Industrial School where a child was detained for a series of years. In addition, there was the Truant Industrial School where they were detained for a few weeks. Finally, there was the Day Industrial school where a child received food, elementary education, and industrial training at the school, but continued to sleep at home.

the new creation. Such a committal would not count as a criminal offence. The Commission envisioned that such schools would be:[810]

> as brisk and lively, as strenuous in the activity of the school room and the workshop, and of the drill yard or gymnasium, as the best organised Truant School; and a license, conditional on regular work and attendance at a Continuation Class, should be easily earned.

Any objection to expense that would accrue in the establishment of these new institutions was justified on the grounds of efficiency. Their success would "bring a perceptible reduction in the number of young loafers or hooligans, and a corresponding saving to voluntary subscriptions, the rates, and the Imperial Exchequer."[811]

As discussed in Chapter 5, this whole approach to the utilization of Continuation Classes in the drive against vagrancy, hooligans, and loafers needs to be questioned. The Continuation Class was not meant to be part of the repertoire of the courts to battle juvenile delinquency. Rather, it was intended that they act as one of the most important tools to furnish the working classes with advanced schooling, and technical and commercial training. To have them utilised as a repository for the most troublesome and least academically inclined youth was contrary to this mission. The Commission saw the continuation school as a instrument for correcting social ills, whereas Craik envisioned them as representing the vanguard of advanced training for the working class. The problem of 'exempts' who were hard to discipline, adverse to academic work, and eager to leave school had already been cited as a drain on the work and potential of the Continuation Class system. If the courts were to add to these pupils, the true dregs of youth society, the educational merit and mission of Continuation Classes in Scotland would have been severely compromised.

In the end these suggestions for the utilization of continuation schools were not followed. However, they revealed a prevalent attitude that the school, and particularly the continuation school was a fundamental tool in the "rescuing" of youth, rather than in their education. Furthermore, the idea of making continuation education compulsory (discussed in Chapter 5 & 6) was deeply influenced by this attitude that the years between the end of schooling and eighteen were ones fraught with pit-falls for the young. Finally, it reflected the belief that physical training was effective for improving the morals and the making of good citizens, as well as improving their physical health.

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[810]Ibid., p. 21.
[811]Ibid.

What concrete effect the Commission had, other than providing evidence for the discussion on physical training and related issues, is arguable. Certainly there is no evidence that its support for greater physical training in the curriculum of every Scottish school had much immediate effect. Nor, as mentioned above, did its plan for extended powers to deal with youth vagrancy come to fruition. It did recommend the appointment of yet another committee to draft a physical training curriculum, which produced a document some years later. However, despite its name and the obvious focus, the Commission also dealt with wider issues of children's health, and its impact would ultimately be in these areas.

Its most significant contribution was to highlight the need for regular and nationwide medical inspection of Scottish school children. The lack of any adequate system of medical inspection was described as as a "very serious defect" in the organisation of Scottish schools. No doubt this opinion was based in part on the lack of reliable information available to the Commission when it started its investigation. But it also reflected the Commission's belief that medical inspection was the first step to mitigating defects in health and physique.[812]

The Commission was also in favour of an unspecified type of feeding program to insure that pupils received some simple fare adequate to maintain good health. The idea that a regular and sufficient meal could be provided at a minimum cost found approval. However, the Commission also embraced the notion that the State should not encroach too far on the independence of parents, nor should it encourage the parents to abandon their duties and responsibilities. This trepidation about extending the role of the school into areas such as feeding and clothing of students was widely present, and would remain so throughout the debate over these issues for years to come. This would be particularly true during the debates of the 1908 Education (Scotland) Act.[813]

In addition, the Commission gathered important evidence regarding the subjects of compulsory attendance at Continuation Classes, and the relationship between work and the health of the young. For example, Dr. George Mackay, Fellow of the Royal College of Surgeons of Edinburgh, testified that poor eyesight was often due to the prejudices of employers. He told the committee:[814]

> I have over and over again spent hours in gratuitously testing and prescribing glasses...only to be told that they [the patient] dared not wear spectacles at their employment as they would have their wages reduced or be dismissed...I

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[812]Ibid., p. 28-29.
[813]Ibid., p. 30-31.
[814]Ibid., p. 418.

> consider that the present prejudices against glasses on the part of employers is utterly discreditable to our twentieth century enlightenment, and often a grave injustice.

Finally, the Commission represented the high-water mark of the debate over, and advocacy of, a national system of physical training. During the course of its hearings evidence was taken on the laudable national systems present in countries such as Sweden, Switzerland, and France. The German system in particular was seen as "remarkable" for its development of ambidexterity which was valuable in many of the trades a pupil could enter after he had completed school. Scotland was perceived as behind areas of England. Testifying before the Commission E. H. Burrows, H.M.I. of Schools for 25 years in England (in charge of Portsmouth at the time of testifying), reported on a more advanced state of affairs in England as well. He told the Commission that when he was assigned to South Hants, which included the Isle of Wight, he had charge of military drill comprised of company and battalion drill taught by specialised instructors. In addition to the physical benefits, the teachers had unanimously found that the training produced obedience, smartness, and concentration.[815]

Some of the recommendations of the Commission such as avoiding tight clothing as it was detrimental to "chest expansion", and that smoking before maturity had a prejudicial effect on physical development, were rather basic. However, proposals regarding a system for Scotland were progressive in emulation of these foreign models. For example, it was proclaimed that physical training should be regarded as "of equal importance with mental training". Furthermore, the mere playing of games, even organised sport, while useful was not sufficient. Rather, systematic training, including drill, was necessary for town and country students alike.

Despite this emphasis on physical training, and the perceived critical need for a national system, no such system ever developed. Slowly the issue of such a national system of systematic physical training diminished in importance until it was hardly discussed at the end of the period. There was some attention given to it by the SED over the course of the next few years, but the real progress would come in other fields; namely medical inspection and feeding.

Part III: Progress and Action From 1900 to the 1908 Act

The SED, however, had not waited until the end of the war or for the report of the Royal Commission to take action. In the midst of the conflict in 1900 it issued Circular #279 on "Physical Exercise in Schools" after being directed to do so by Lord

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[815]Ibid., p. 31 & p. 86.

Balfour of Burleigh. Its purpose was to direct the attention of School Boards and Managers to the 'great public importance' of physical exercise in schools, especially military drill. In addition, to the health benefits physical exercise was also deemed to develop habits of comradeship, responsibility, and individual resourcefulness, which were held to be "of supreme importance...to the nation as a whole." More importantly it introduced the individual pupil to the "principles which lie at the foundation of national defence...and they bring home to him his duties and responsibilities as a citizen of the Empire."[816]

In order to accomplish these goals the circular encouraged school managers and Boards to work in co-operation with "Local Associations." The associations could prove useful in providing the elements of military drill and in the formation of Cadet Corps for young men no longer required to attend school. These Cadet Corps would not only prove useful to the health of the individuals and the national defense, but also act to stimulate interaction and sympathy between different classes of participants. Furthermore, in seaboard parishes it was hoped that boards and local associations would specially develop nautical training.[817]

In line with the thinking of the National Efficiency movement it was contended that such training would also prove of benefit to the school as a whole. Under the new Code grants were not based on the number of individual subjects taught, but rather the overall "efficiency" of the school. Therefore, adding courses in physical exercise would not bring a corresponding government grant. However, the circular argued that this should not prevent schools from adopting such programs, as it would surely raise the general efficiency of the school and thus its grant.

First and foremost, it must be pointed out that the circular did not make such measures mandatory. Rather, it embodied hopeful suggestions, not the force of law. Schools and their managers were more or less free to ignore the circular if they so chose. Scottish schools which did attempt to implement the circular immediately met with problems. Those trying to adopt courses in physical exercise and military drill in their school encountered a shortage of qualified instructors, and a limit of available time in an already crowded school day schedule. Despite this the idea did meet with some enthusiasm from managers of Continuation Classes in Scotland. Meanwhile most waited for the findings and suggestions of the Royal Commission to be made public.[818]

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[816]"Physical Exercise in Schools" Circular 279, Feb. 3, 1900. PP 1900 XXIV, p. 263.
[817]"Physical Exercise" Circ. 279, p. 264.
[818]"CCES Report for the Year 1901." PP 1902 XXXIII, pp. 12-13.

The Royal Commission's main action was to recommend that yet another committee be set up. It was to be the task of this committee to make concrete suggestions in the form of a syllabus for a suitable course of physical exercise for Scottish schools. However, the cause of physical education continued with varying results on the local level in the interim. H.M.I. Stewart reported in the year 1903-04 that military drill had reached the "highest pitch of efficiency" in the schools of Kinghorn, Ferryport-on-Craig, and Largoward. The reports of other school inspectors varied. H.M.I. King reported that playgrounds were seldom ever suitable for physical exercise, and although drill should have been a daily exercise this was rarely the case.[819]

The lack of qualified instructors also continued to vex SED officials. H.M.I. Smith reported that in general drill and other types of physical exercise were taught by ordinary staff. However, in some of the country towns the schools had "old soldiers" as janitors who were drafted to lend help and their military influence. In the most fortunate areas such as Perth, Crieff, and some rural parishes special visiting masters had been employed to instruct physical exercise. The latter was certainly considered preferable to having your school's janitor called into service for the cause.[820]

It was not until 1905 that the cause of physical education was put on a truly solid footing with the issuing of the "Report on Physical Training in Schools" by Captain Foster, and the long awaited handbook "The Syllabus of Physical Training for use in Public Elementary Schools". Foster considered the new syllabus far from perfect, but certainly better than nothing at all. A feeling that must have been shared by many as they had waited many years to see it at all.

One of the major recommendations of the handbook was that schools should employ visiting instructors for drill and exercise (instead of janitors or ordinary staff.) Foster's report, however, revealed that these visiting instructors were often far from able. He reported that most instructors engaged in military drill that consisted of "formation of fours" and marching in formations around the school yard. This type of drill Foster deemed as worthless for military purposes and the physical development of the children. In comparison he recommended:[821]

> systematic and scientific free standing movements to secure harmonious development of the whole body and vital organs, to overcome the bad effects of the confinement in school and the tendency to stoop, and to gain that briskness

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[819]See generally, "CCES Report for the Year 1903-04." PP 1904 XXI 1, pp. 1-33; "General Report for the Year 1903, Southern Division" HMI Stewart. p. 237-238.
[820]"Report for the Year 1903" Stewart, p. 238.
[821]"Report On Physical Training in Schools" Foster, Inspector of Physical Training. "Report for 1905" Scougal, Appendix No. 1, PP 1906 XXX, pp. 265-66.

> and good carriage which are so lacking with many school children.

The general tone of Foster's report on elementary schools mirrored that of his observations above. He found that the time devoted to physical activity varied greatly from school to school, but a mere half-hour a week was normal. Though many had called for drill to be a daily routine, Foster hoped only that schools would find 1 1/2 hours a week in their schedules for physical activity of any kind. Nor did he find that children in general had suitable clothing for exercise. Foster further hoped that those schools could, such as in Edinburgh, would take advantage of nearby public baths for basic washing as well as swimming. Games could have also been employed to a greater degree for actual exercise, rather than unorganized running about. He felt this was particularly important in slum schools. In addition, few older schools had any special facilities such as gymnasiums, though newer ones generally were better equipped. Foster saw this as the most preferable situation due to the generally inclement weather of Scotland. In a central hall or gymnasium physical exercise could be carried out "under the most favourable and cheerful conditions, independently of the weather." Unfortunately such facilities were the exception rather than the rule.[822]

In comparison Foster found the Higher Class Schools of Scotland better suited for, and more engaged in physical exercise. Many had specially trained instructors that devoted the whole of their working day to the subject. As a result the courses were a more common and an integral part of the school curriculum. However, even in these schools Foster found that the subject had to be placed on a "higher and more scientific footing", and that better apparatus was required. His conclusion as to the quality of work done by these schools was not very encouraging. He wrote:[823]

> With regard to the lessons seen during my visits, the exercise given to different classes did not seem to be very suitably graded, especially those for the junior pupils, and would not ensure even development of the whole body. Muscular development appeared to be the chief object in view. The very gradual and careful process of building up and shaping the young bodies, securing sound health, well-shaped chests, and straight spines, appeared to be rather lost sight of...At some boys' schools it seemed to be rather the fashion to adopt a slouching walk and general bad carriage.

The lack of properly trained teachers continued to present an obstacle to the proper development of this field of education. However, Foster noted that the creation of the Physical Training College at Dunfermline would hopefully result in a

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[822]"Report for 1905" Scougal, pp. 266-67.
[823]Ibid., p. 269.

satisfactory supply of teachers specially trained in this field, although that may have still been a few years off. In the meantime the staff of the Carnegie Gymnasium had performed fine work in the supervision of school children in Dunfermline, but much of the rest of the country remained without trained staff for physical exercise courses.[824]

Captain Foster's conclusions and recommendations were not new, and repeated well known complaints and suggestions for improvement. They included: Scottish schools should employ properly trained personnel for physical exercise and military drill courses; better facilities and apparatus should be made available; physical exercise should be made a regular and systematic part of every school's curriculum. However, two of his recommendations opened relatively new territory of development.

First, Foster also called for a nationwide record of physical measurements and other facts regarding a child's health. Such statistics should be gathered using a uniform, nationwide system. Such a census could quickly detect any improvement or deterioration in a section of the population. Resources could then be brought to bear on the most stricken areas of Scotland.

The Glasgow School Board had already commenced keeping such records. In 1905 the School Board decided to institute "Records of Physical Measurements" of children attending primary and Higher Grade schools. In addition, they decided to try to ascertain particulars of the housing and general physical surroundings of the children. Schedules were prepared for teachers to fill out, and sent to 77 schools classified into four groups ranging from the poorest district of the city (26 schools, 24,661 children) to the 'highest class' (9 schools, 11,395). Returns were made for 72,857 children (36,883 boys, 35,974 girls), representing the largest such gathering of statistics yet.[825]

The results, published in 1907 accompanied by extensive tables and diagrams, were cause for concern. For example, the average weight of the children between 5 & 18 was uniformly below the standard set by the Anthropocentric Committee, and with regards to boys the average was below the standard for both weight and height. Despite this general deficiency, it was not surprising that the best group of both boys and girls came from schools in Group D. For example, when the girls in group D are removed the average for both height and weight in girls fell below the set standard.

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[824]See generally, Maclean, I. A. The History of Dunfermline College of Physical Education. (Edinburgh, 1976), pp. 21-29.

[825]"Report on a Collection of Statistics as to the Physical Condition of Children Attending the Public Schools of the School Board of Glasgow" Mackenzie, W. L. & Foster, Capt. A. Cd. 3637. PP 1907 LXV, pp. 273-74.

The situation among the more than 24,000 students in the poorest district was bleak. At age 10 girls were 2.7 inches and 7.2 lbs. below the standard, and at 13 it had increased to 3.4 inches and 14.3 lbs. below. It was commented that the gradation in height and weight from the poorest group to the best was one of the most striking features of the study. Also of significance, schools from the poorest districts provided no students after the age of 15.[826]

The Glasgow study also confirmed the correlations the Royal Commission had made regarding health and housing. Again assuming the numbers of rooms of a house as indicative of social status, the Glasgow report found a rigid hierarchy.[827] Table 8.3 shows these results.

Table 8.3: Housing and Health from 1907 Report on Glasgow School Children:

		1 Rm	2 Rm	3 Rm	4 Rm
Boys					
	Height	46.6in.	48.1	50.0	51.3
	Weight	52.6lbs.	56.1	60.6	64.3
Girls					
	Height	46.3in.	47.8	49.6	51.6
	Weight	51.5lbs.	54.8	59.4	65.5

It was noted that an even greater variation occurred up to the age of 14. The reason being that so few children from poorer schools were available to assess after that age. However, the report also pointed out that regardless of housing, all remained below the accepted standard.

Second, Foster brought attention to an often discussed, but widely neglected measure to improve the health of the nation's school children: medical inspection in schools. He noted that while partial medical examinations had been made in selected schools of various towns, no national system existed. Furthermore, children in slum areas who were most in need of attention were almost completely ignored. The children of more "fortunate" areas lived in generally cleaner and more healthy conditions, while those in the slums suffered not only from their surroundings, but also from a distinct neglect on the part of their parents.[828]

The issue of medical inspection was for many commentators one of the basic issues with regards to the health and welfare of Scotland's young "imperial race." It was rationalized that medical inspections in school would reveal physical ailments before they became serious, direct children and parents towards appropriate care, and

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[826]Ibid., p. 275 (See also accompanying statistics in Appendix to report).
[827]Ibid., p. 275. See also, diagrams pp. 337-341.
[828]"Report for 1905" Scougal, pp. 268-69.

keep an eye on the hygiene of more neglected children. In line with the ideals of the 'efficiency' movement, it was felt that inspections would have not only an immediate effect, but also long term benefits. However, the movement never gathered much momentum during this period. For example, H.M.I. Scougal reported that in the Southern Division medical inspection had not even been attempted except in Edinburgh and Fifeshire. It was, for all practical purposes, nonexistent throughout the Borders.

In Edinburgh, progressive on many educational fronts during this time period, the authorities had made important strides towards securing the medical inspection of all school children. In the spring of 1906 the School Board had taken the important step of appointing a Medical Officer. Dr. J. H. Meikle was to give the whole of his time solely to the medical inspection of the city's schools. However, it was admitted that Meikle on his own could not perform thorough annual inspections of each child, as was recommended. The Merchant Company of Edinburgh had also made a similar appointment for the secondary schools under its management.

However, it was Dunfermline that may have enjoyed the most thorough system of medical inspection to be found in Scotland. Grants from the Carnegie Trust and the presence of the College of Physical Training gave it not only resources but also personnel. Medical officers attached to the College aided in the inspection of school children, and the Burgh further employed two doctors.[829] H.M.I. Smith reported that the staff took detailed measurements and kept elaborate statistics on the pupils, not unlike what had been proposed by Foster on a national scale. However, it was further reported that outside of these specific examples there were no arrangements made for medical inspection anywhere except in the Parish of Ceres and under the School Board of Dysart. Unfortunately, these efforts were woefully under-funded.[830]

In this respect England had a distinct advantage. The Education (Scotland) Act of 1908 was, in many ways, an attempt to equalize the health and welfare authority and capabilities of school officials in Scotland and England. For example, Clause 4 allowed a School Board to undertake medical examinations, and further gave the SED the authority to require the board to do so when the Department felt the existing situation required it. If a school board or manager was not under SED compulsion, medical examinations remained voluntary. However, Clause 17(6) committed the SED to paying for one-half of any provisions made for such inspections. This was already the legal situation in England.[831]

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[829]It was duly noted with approval that one of them was even a 'lady'.

[830]"Report for 1907, Southern Division" Scougal. PP 1908 XXVIII, pp. 367-68; Maclean, Dunfermline College. pp. 24-26.

[831]"Education Act, 1908." Reprinted in Roxburgh, The Law of Education in Scotland. pp. 53-78.

The same was true of providing school meals to necessitous children. Under the Education (Provision of Meals) Act of 1906 education authorities in England and Wales had the ability to supply free meals to needy children, and to recover costs from parents where possible. Clause 6 of the Scottish Act gave school authorities north of the border equal power in this regard. However, the Scottish law went further than its English counterpart. It made habitual and willful neglect by an able parent to supply proper food or clothing, or the sending of children to school in a filthy or verminous condition a "cruelty to children" offence and allowed for appropriate punishment. In addition, it required the school board to conduct an investigation of the parents of any child receiving free school meals in order to determine if the parent is in some way at fault.[832]

The reason for these "safeguards" were revealed in the Parliamentary debates, and went to the heart of the Scottish character and traditions. No less eminent an individual than the former Secretary of the SED Henry Craik, now an opposition backbencher, spoke out against the provision of meals to school children. He claimed that once schools began to do such things that were the "right and proper duty of a parent, and made it a part of [the] education machinery, they broke from a principle that was of the very highest value, socially, and morally for the whole population of the country."[833]

Other MPs openly scorned Craik's view that the supply of meals and other "social services" by schools would "undermine the independence of the Scottish race." This contingent, represented by individuals such as MPs Esslemont (Aberdeen, S.) and Barnes (Glasgow, Blackfriars), embraced the concept of the modern school extending into health and welfare issues, and even replacing parents when they could not or would not fulfil their duties. Thus, medical inspections, school meals, and related services should be supported and even made compulsory. Barnes considered himself a realist. He agreed with individuals such as Craik that the best place for children to be fed was "over the table legs of their parents", and that it was 'lamentable that in this twentieth century of civilization such provisions should form part of an Education Bill". However, he concluded that "there was no use in shutting their eyes to the obvious facts."[834] In the end a compromise was struck which, as explained above, allowed schools to provide the necessary services, but also required them to investigate the parents of the children to whom the services went.

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[832]Ibid., Clause 6.
[833]The Parl. Debs. Vol. 188. 84.
[834]Ibid., 119-120.

The debates over medical inspections and school meals reveal that the influence of the Boer War had subsided a good deal in the previous six years. Indeed, the whole spectre of military needs and requirements had been eclipsed by more altruistic motives for health and welfare services in schools. While many MPs still talked of the requirements of an imperial race, they were more likely to speak of urban squalor, orphans, youth crime, idle adolescents, and suitability for employment in relations to topics such as medical inspections.

But what of military drill and other forms of physical exercise? While the social benefits of such courses had crept into the Parliamentary dialogue, it had not co-opted the debate as had medical inspection. Indeed, it was in this area that the impact of war and the military remained strongly evident; especially among the MPs that wanted to use the 1908 Act to make physical training compulsory. Speaking in favour of mandatory drill and training Craik stated that nothing would do students more "good and raise them more in their citizenship than a thorough physical training", and it would also help meet the goals of the Territorial Army.[835] The Earl of Ronaldshay (Middlesex, Hornsey) called specifically for compulsory military drill. He proclaimed it to be the finest way of teaching pupils "their responsibility towards the State, and encouraging them to enlist in that force when they arrived at an age to do so." The Earl also warned the House that it was to be brute force that would determine the destiny of nations for a long time to come.[836]

Ultimately amendments to make physical training compulsory in elementary school, and drill or physical training mandatory for school leavers up to the age of 17 years all failed. This was in part because of opposition from Haldane in his position as Secretary of State for War. While recognizing the need for physical training and drill he felt it was not yet time to make it mandatory, and to do so until the age of 17 would decimate the voluntary services. What was included in the Act was a provision to compel Continuation Schools in Scotland to make provision for instruction "in the laws of health and to afford opportunity for suitable physical training."[837] There was, however, no measure that compelled students to take advantage of such classes or facilities.

In the final analysis the Education (Scotland) Act of 1908 confirmed the new expanded role of the Scottish school in the 20th century. No longer was a school to be concerned solely with academic matters. In its new incarnation the school was to concern itself with the whole well-being of the pupil. After the 1908 Act there was no

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[835]Ibid., 86.
[836]Parl. Deb. 4th ser., Vol. 196, Nov. 10 1908. 198.
[837]"1908 Act", Clause 10 (1).

way to turn back the tide. The debates in Parliament reveal that the military requirements of Britain and Scotland continued to exact an influence on the educational reform of the country. However, they had diminished from the fervour that had accompanied the Boer War and its immediate aftermath. The presence of an ever stronger Germany continued, however, to influence reform. In reference to Germany one MP said during the debates, "We could not keep our place in the world if our boys were not more disciplined than they had been in the past."[838]

Part IV: Progress After The 1908 Act

In the aftermath of the 1908 Act the greatest progress was made in the provision of medical inspection throughout the country. As the statistics below attest there was generally a greater attention paid to the "general welfare" of the child apart from his academic instruction, however, medical inspection far outpaced other areas.[839]

Table 8.4: Spending By Schools on Non-Academic Activity

	Providing Accommodations &c. for Meals (exclusive of food sect. 3(2)	Information Agency Section 3(5)	Medical Inspection Sect. 4	Food, Clothing or other Expend Sect. 6	
	£	£	£	£	Total
08-08	67	7	1,530	11	1,779
09-10	290	491	5,462	921	8,038
10-11	3,777	748	11,843	2,768	20,460
11-12	4,586	608	16,836	3,172	27,404
12-13	4,396	--	17,935	5,718	

Under sections 4 and 17 (6) of the 1908 Act the SED pursued a vigorous policy of establishing medical inspection nationwide. By the 1911-12 session there were definite schemes of inspection in all the large urban districts and in no fewer than 29 of the 32 county districts, and in 1911 the first report on medical inspection in Scotland was released.[840] It was hoped that in a year or two satisfactory provision in terms of the Act for the oversight of the health of school children would be made in every district of Scotland. In approving schemes the SED consistently endeavoured to secure that the new School Medical Service, where instituted, was in as close touch as

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[838]The Parl. Debs. Vol. 188. 154.

[839]"CCES Report for 1912-13." PP 1913 XXII, pp. 4; 1912-13 statistics from "CCES Report for 1913-14." PP 1914 XXIX, p. 17. Note: in 1912-13 there was the first grant for medical treatment of £6, 147.

[840]It is a fair observation to make that School Authorities which had been progressive in other areas were equally so on the issue of medical inspection. As previously mentioned, Edinburgh had made its first strides in 1906, and Dunfermline, which benefited from the presence of the College of Physical Training, was far ahead of the rest of the country. Other authorities, although slower in comparison to the most progressive, moved fairly quickly after the 1908 Act. For example, medical inspection was present in Midlothian by 1909, and Leith (Burgh) and Haddingtonshire had complete schemes by 1910.

possible with the Public Health Authorities. Furthermore, strides were being taken in the area of medical treatment for school children (discussed in greater detail below).[841]

By the 1913-14 session a satisfactory scheme of medical inspection was in place in every county and in each of the six large urban districts. The SED had achieved its goal with the co-operation of school officials throughout the country. Yet the Scottish public was still not thoroughly behind the concept of medical inspection. Though no outright hostility was present, it was reported that there was an "undeniably heavy weight of apathy and inertia" from the public.[842] Even in areas such as Fife, which had established medical inspection early on, the public often remained unconverted to the importance of health related issues. H.M.I. Smith reported on such parental objection, noting its prevalence in the district around Anstruther. He concluded that Fife parents were seldom indifferent to the health of their offspring, and what seemed to be indifference was really ignorance or prejudice. Yet he concluded, "it is almost impossible to get parents to pay attention to the milk teeth of their children...It is almost equally difficult to get them to procure glasses, unless a child's eyesight is so defective as positively to bring him into danger."[843] Regardless the school Inspectors reported progress:[844]

> We are informed that personal cleanliness is on the increase, and greater attention is given to such plain matters of hygienic practice as the proper cleaning of the teeth. The results which it has already been possible to record in some schools are enough to prove the enormous sum of physical and general benefit that could be achieved by persevering attention to simple preventative measures...if they became general.

In the same year the SED published a circular that outlined a national standard for conducting medical inspections in order to assure that they conformed to a common standard. It urged that all inspections should be conducted in accordance with the regulations embodied in the Department's Memorandum on the Medical Inspection and Supervision of School Children of 31st March 1909. This memorandum had listed areas to pay close attention to, such as skin diseases, eyes and vision, ears and throat, and teeth. It also laid out 27 items that should be noted. These included items such as defects of articulation (lisping, stammering), general nutrition, cleanliness (and degrees from clean to dirty), and height and weight.[845]

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[841]"CCES Report for 1911-12" p. 5.
[842]"CCES Report for 1913-14" PP XXIX 1914, p. 14.
[843]"Report for the Year 1911, Southern Division" HMI Jamieson Reports &c., issued in 1911-12. p. 30.
[844]"CCES Report for 1913-14." pp. 14-15.
[845]"Memorandum on the Medical Examination and Supervision of School Children" Enclosure to C. 421, Mar. 31, 1909. Reports, & c. issued in 1908-09. pp. 48-51.

In cases where inspection was not provided for under a Scheme approved for the purposes of Section 17(6) of the Education Act of 1908, it should be conducted by a medical practitioner who (a) held a Diploma in Public Health or (b) possessed other qualifications which were accepted by the Department as equivalent. In addition, the practitioner could not be engaged in private practice. School Boards retained the authority to institute a supplementary scheme of Medical Inspection for the children attending schools within their district, provided that any such supplementary scheme had previously been submitted to the Department for approval.[846]

In turn, medical inspection of Scottish schools raised a whole host of secondary issues. Some were mundane, such as the belief that inspection was an incentive to parents to keep their children clean and tidy. However, first and foremost, was the actual condition of health that it revealed in the country. The Royal Commission of 1902 was the first attempt to study specifically the health of Scottish school children. However, its examination was limited in scope and the conclusions that it drew for the country at large were only speculative. The system of medical examination that spread throughout the schools of the country provided for the first time comprehensive empirical evidence for previous suspicions.

What the inspectors found and reported, of course, varied greatly from district to district.[847] For example, the Medical Officer spoke favourably of the nutrition of the children in Roxburgh and Selkirk, and apparently found few bad cases. In comparison, in Peeblesshire,16% were found to be below the average, and in Fife as well malnutrition was too common.[848] Yet despite these disparities some general trends and common conclusions can be made. First, while the Royal Commission's empirical conclusions may not have borne out nationwide, their general conclusion that there was a degeneration of individuals which called for attention and amelioration was supported. For example, a school inspector in the Western Division proclaimed that the variety of diseases prevalent among children was so great that he only had time to focus on one or two.[849] Second, amongst this wide range of diseases malnutrition continued to present a serious problem, both in the city and in the countryside. Third, the most prevalent types of ailments concerned the eyes, ears, or teeth.

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[846]"Minute of the CCES; Regarding the Provision of the Medical Examination and Supervision of Pupils Attending Schools." PP 1913 L [Cd 6787] 913.

[847]See generally, "First Report on the Medical Inspection of School Children in Scotland" Mackenzie, W. L. Reports, & c. issued in 1912-13. GEB. 5. [Mackenzie's Report is a general piece, chronicling the history of medical inspection, discussing and printing relevant circulars, and providing excerpts from previously published inspectors reports.]

[848]"Report for 1911" Jamieson, pp. 29-30.

[849]"General Report for 1911, Western Division" HMI Fraser. Reports & c., Issued in 1911-12, p. 39.

The continued presence of malnutrition was disturbing, and was seen as a particular threat for two reasons. First, it was often the precursor to greater physical problems, and second it was a direct impediment to effective learning. If it is true that an army marches on its stomach, it is equally true that a class learns in much the same manner; hungry or malnourished children did not make good students. While the numbers of students in this condition was certainly cause for worry, this conclusion was based on partial statistics. Even universal medical inspections had not brought comprehensive figures, and this was particularly true in the west of Scotland.

In addition, hunger and malnutrition was not always found in the presupposed areas. In their report the Royal Commission postulated that Glasgow would share figures similar to or worse than Edinburgh, and it was long assumed that nutrition was a serious problem in the city. However, the reality was very different. Of Board School students in Glasgow 59.3% were classified as exhibiting a good level of nutrition, 37.8% an average one, 2.9% bad, and only .04% very bad. The numbers though marginally worse were substantially similar for Voluntary Schools and "Mentally Defective" schools. It was only in "Physically Defective" schools that the percentages became appreciably worse--17.1% good, 46.6% average, 35.7% bad, .4% very bad.[850]

The great concern was that those that did suffer from malnourishment were likely to suffer from related diseases such as rickets. Described as being 'due to improper dieting and insufficiency of sunlight and fresh air,' rickets was by 1911 a disease almost exclusively of the poor and confined to schools attended by the poor in the cities. Also, as malnutrition was found to be more common in boys than in girls, it was not unexpected that boys suffered more often from rickets.[851] Yet malnutrition itself was not, as had been often assumed, confined to the large cities or even to those in extreme poverty. It was found in otherwise healthy rural areas where extreme poverty was practically non-existent. Many parents were simply "too careless or indolent to make a solid meal suitable for an actively growing child."[852]

Of greater significance was the regularity of children suffering from three groups of ailments: those of the eyes, ears, and teeth. It was not only the fact that these were the most common ailments, but also that they appeared in such vast numbers. In Peebles only 3 per cent. of boys and no girls were stated as having "a satisfactory set of teeth at 14 years of age." In Roxburgh and Selkirk the number was 8%.[853]

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[850]Ibid.
[851]Ibid., p. 40.
[852]Ibid., pp. 39-40.
[853]"Report for 1911" Jamieson, p.29.

The reports from the Western Division, largely consistent with those from other areas, characterised defective eyesight as "a very common and distressing problem." It was all the more distressing because although it could be treated comparatively easily, if left untreated it acted as a very real impediment to learning. In Glasgow medical inspection of children's eyesight had begun in 1906 and had made steady progress over the years. The medical inspector estimated that in 1905 only 25% of those children who should have had glasses had them. By 1909-10 that percentage had risen to 50%. Though this improvement was impressive, it still meant that half of all pupils in the city that required corrective lenses went without.[854] Poor eyesight was not the only problem in this area. External eye diseases such as inflammation of the eyelids and ulcer of the cornea were also common. The School Medical Officer for Paisley remarked: "'Such diseases are extremely common, especially among the younger children of the poorer schools. Though parents may seek medical advice, they rarely persevere with the treatment.'"[855]

While ailments in these areas were the most common it should not be concluded that they were the only ones to receive attention. H.M.I. Fraser reported that the Medical Inspectors were finding their work growing at an alarming rate. Children were regularly excluded from school when found to have a contagious disease, such as consumption. In other situations, especially those in which the child was found to be 'verminous', steps were taken to keep the child in school while limiting, if not treating, the ailment. Such was the case of ringworm which could take months to cure, during which time the student was physically able to attend school. In Clackmannanshire such children wore close-fitting linen caps in school which prevented infected hairs from being blown about or dropping on the seats and desks. In addition, the child's outdoor headgear was not hung in the cloak-room, but given to the teacher who put it in a designated area where it could do no harm.[856]

In turn, the findings of medical inspections led to much theorising about the impact of such poor health on the nation, the individual, and on education itself. H.M.I. Millar postulated that hygiene and health issues related to absenteeism. He stated that "there can be little doubt...that with the greater attention now being paid to the health of the children, the percentage of absenteeism due to illness will tend to diminish."[857] Indeed, those suffering from ringworm often missed school although they need not. Ringworm, a vegetable parasite which infected the head and hair, led to destruction of the hair and finally baldness. It was understandable that many children

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[854]"Report for 1911" Fraser, p. 40.
[855]Ibid.
[856]"Report for 1911" Jamieson, p. 31.
[857]Ibid., p. 23.

chose not to attend school, rather than face the stigma that it would bring.[858] For those that did show up to school in bad health it was widely documented that their poor physical condition inhibited their education. For example, in regards to the 5,053 pupils examined in 1910-11 in Midlothian and Peebles it was noted that "a considerable proportion of the children appear to be suffering from diseased conditions and defects which are prejudicial to their educational progress." In addition, 20.6% in Midlothian were found to be in the 'below average' nutrition group; a level deemed to impede effective studies.[859] Possibly more important, medical inspection revealed the problem so that solutions could be proposed in an informed manner.

Thus, during the years following the 1908 Act topics that addressed or proposed solutions rose in prominence. One of these was the cleansing and sanitation of schools. This encompassed a whole range of actions including the ventilation of school rooms, increasing natural light, disinfection of classrooms and materials, and proper regular cleansing. Prior to the 1907 publication by the SED of detailed directions for the "Cleansing and Disinfection of Schools" the schools had been under the general supervision of the Public Health authorities. In counties from approximately 1889 (earlier in some cities) health officers exercised this supervision which included sanitation and cleansing. However, such cleansing or disinfection normally occurred only after an epidemic (which was often the only time a health officer showed up as well).[860]

Although steady improvements had been made to water supplies, drainage, and general condition of schools under the health officers over the previous 20 years, the regular reports of medical inspectors and ordinary school inspectors brought attention to the dirty and unsanitary condition of Scottish schools. Disease was seen as a direct beneficiary. One doctor wrote that, "The object of school cleansing is to prevent disease. Absence of cleansing means presence of dirt, and presence of dirt, sooner or later, means presence of disease."[861]

Although reports, notably that of the Royal Commission, pointed out that the poor condition of pupils' housing was often a major contributing factor in poor health and the verminous state of students, the school itself was judged to exacerbate the situation. While the SED had little control over the domestic conditions in which pupils lived, it could ensure that when they came to school they would be in a healthy and clean environment that could provide a check on their condition. Instead of

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[858]"Ringworm; Its Prevalence in Schools, Its Treatment, and Its Cure. Part I." EN Mar. 10, 1910, p. 288. See also, "Part II" EN Mar. 25, 1910, p. 318; and "Ringworm." EN Apr. 22, 1910, p. 419.
[859]"Report for 1911." Jamieson, p. 29.
[860]"First Report" Mackenzie, p. 18.
[861]"Cleansing and Disinfection of Schools." Meikle, J. H. EN Jan. 14, 1910, p. 38.

providing this check the school often was a cause or at least a contributing factor. At a conference in Edinburgh on the prevention of Tuberculosis (consumption) it was noted that unclean schools coupled with poor ventilation and lack of exercise at school contributed to the disease.[862] Dr. C. Murray, Schools Medical Officer to the Dumfrieshire County Council, asserted that dust containing infections and parasites was a major cause of verminous children. Another study found 60-80% of students in some areas to be verminous; due mainly to the ease with which lice etc. spread in crowded, unsanitary schools. Indeed the success of the SED in spreading education and increasing attendance was unwittingly aiding in the spread of such "vermin" according to Gordon A. Lang, Medical Officer to the School Board of Inverness.[863]

It was soon held that "the speedy abolition of all abolishable filth is the first process of education."[864] While reports did not indicate universal progress toward this goal, they did reflect a greater activity generally in schools, and a greater concern for the issue. In an attempt to stop the spread of parasites and other "vermin" the Edinburgh School Board encouraged daily "moist cleaning" and spraying with disinfectants. Manuals were published such as "Practical Disinfection", and businesses spotted the demand and responded with a bevy of products to aid in school cleansing (as evidenced by the steady appearance of advertisements for such products). Finally, Scottish officials attended international conferences on the subject, and often bragged of the priority Scotland put on the issue.[865]

Indeed the issue of cleansing schools even led to controversy. Some School Boards attempted to introduce "Cleansing Registers" to mandate cleansing and keep track of progress. The registers were deeply resented by school employees, and were even seen to be breaking their spirit. In the end practical resistance to their use resulted in their failure.[866] However, overall real progress was made in the attitudes toward school cleansing and disinfection. By 1910 there was reported steady growth in sanitary science, and it was concluded that: "dust and dirt were not considered deadly in the old days..now they are regarded as the most odious enemies to the health of children in the classroom."[867]

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[862]"Prevention of Consumption." EN Jul. 8, 1910, p. 684.

[863]"Cleansing and Disinfection." EN Jan. 14, 1910, p. 38. "The General Election and the Public Health." EN Jan 14, 1910, p. 52. "Ringworm: Its Prevalence in Schools" EN March 18, 1910, p. 288.

[864]"Report for 1911." Fraser, p. 10.

[865]"Cleansing and Disinfection" EN Jan. 14, 1910. "General Election." EN Jan. 14, 1910. (For examples of newly appearing advertisements for products see EN Vol. 35, pp. 44, 277, 289.) "International Congress on Hygiene" EN Aug. 19, 1910, p. 801.

[866]"Cleansing of Schools in Scotland" EN Sep. 9, 1910, p. 870. "School Cleansing and Cleansing Registers" EN Jul. 15, 1910, p. 706.

[867]"The School Cleansing and Disinfection Register" EN Mar. 18, 1910, p. 276.

The issue of school cleansing was often coupled with establishing higher standards of comfort and personal cleanliness among the pupils. H.M.I. McKechnie reported that in Glasgow spray baths were installed by the Board in 1909, and by 1911 were in use in three schools--Govan Street Day Industrial School, Camlachie, and Dovehill. At Govan there were also plunge baths and vermin destructors. The latter, an apparatus for destroying lice and their eggs on the clothes of the children, had proved to be of particular service. In Glasgow it was advocated that spray baths be installed in all the schools situated in the poorer parts of the city, as was being done in Annfield and Martyr's Schools. Such provisions were apparently appreciated by the students, and were seen as beneficial to both teachers and parents. Yet despite these efforts ailments associated with sanitation and cleanliness were common in places and unacceptable. For example, in 1911 Dumfries and Paisley both reported regular occurrences of head diseases such as Pediculosis and head lice; with Paisley declaring the campaign to destroy vermin a failure until structural changes were made in the school.[868]

The issue was also tied to the steady increase in building and school expansion. Some expansion was undertaken in order to alleviate overcrowding, or to replace old and outdated buildings. It made little sense to invest substantial sums of money in new facilities if, through lack of regular and effective cleaning, they became as insanitary as the old ones. H.M.I. Jamieson wrote in 1911 that many "handsome and expensive buildings" were not kept clean, and that poor ventilation was a problem which architects did not seem to consider.[869]

In other cases it was an issue of the school practising the fundamentals it preached to its pupils. For example, H.M.I. Thomson noted with some degree of irony that he often found a Supplementary Class receiving instruction in the laws of health, which had become a compulsory subject, in a room where the laws of health were flagrantly violated. This was not an isolated incident. H.M.I. Fraser and Clark made consistent remarks from their districts in the Southern Division.[870] Overall, it was hoped that when the medical reports became known it would raise the conscience and awareness of the community to a level that it would no longer "tolerate the continuance of the existing state of matters."[871]

A close connection can also be found between medical inspection and a renewed interest in the feeding of school children. It was chiefly the findings of medical inspection that brought "home the necessity for feeding a certain percentage of

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[868]"Report for 1911" Fraser, pp. 10-11.
[869]"Report for 1911" Jamieson, pp. 16-17.
[870]Ibid., p. 17.
[871]Ibid., p. 28.

school children who have hitherto been existing in a state of semi-starvation."[872] Yet school boards moved slowly and appeared reluctant to set up schemes for providing food to necessitous children, despite the fact that sections 3 (2) and 6 (2) of the 1908 Act allowed them to do so and made funds available for it. For example, by 1911 only Edinburgh had set up such a scheme in the whole of District #1. By 1910 the city had a complex scheme capable of providing 5,000 meals, and a system of distribution to schools that did not have adequate preparation facilities. In addition, the school authorities had involved local charities by asking them to provide meal vouchers to the needy.[873]

Similarly in District #2 H.M.I. Clark reported that only Leith (Burgh) School Board had a scheme in operation under the 1908 Act. In Dunbar and Haddington, where there was a considerable number of necessitous children, a voluntary system had been working for many years, but was not directed or supported in any way by the School Board.[874] In District #4 H.M.I. Smith had consistently pressed school managers to provide a midday meal, but he reported that the success of his efforts has been slight. Indeed the number of schools at which such meals were supplied decreased in 1911 from 31 to 27. In District #5 H.M.I. Millar reported that the problem of feeding necessitous children didn't arise, except in the City of Perth. There winter meals were provided on payment in the case of children whose parents could pay, and free only to those pupils who were considered "destitute". The story was much the same throughout District #6.[875]

In 1912 a comprehensive examination of schemes (or lack thereof) was made in the Southern Division. It was not unsurprising that Edinburgh was found to have lead the way, with only Leith adopting a similar scheme, while schemes for feeding as well as clothing pupils were completely absent throughout the Border District. However, was this necessarily cause for concern? Jamieson reasoned that in the Borders the children were mostly from small towns or villages where they could easily go home for a meal. The lack of interest by other Boards was attributed to the positive economic conditions:[876]

> During the past two years the state of employment has been so good and the condition of the working population has been, on the whole, so much more satisfactory than usual, that the need for organisation has probably been less

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[872]Ibid.
[873]"The Feeding Season" EN Nov. 25, 1910. pp. 125-6.
[874]Report for 1911." Jamieson, pp. 25-26.
[875]Ibid., pp. 27-28.
[876]"Report for the Year 1912, Southern Division" HMI Jamieson, Reports, & c., issued in 1912-14. pp. 10-11.

forcibly brought home to School Boards than in normal times.

Yet Jamieson saw danger in this sense of security and the resulting complacency. He pointed out that areas such as Hawick and Galashiels were supported by industries that had proved themselves liable to fluctuations. He encouraged a prudent approach of giving thought to the circumstances that might arrive in the near future. For example, H.M.I. Clark reported that in the district of Fife a miners' strike the previous spring had forced certain Boards to take advantage of Section 6(2). Yet even in these circumstances there was resistance to the idea of free meals. One of the largest Boards questioned the legality of providing meals to the children of parents that "refused to work", and subsequently refused to incur any additional expenditure. Furthermore, except during that one period of exceptional necessity Clark noted that no Board used the powers that the 1908 Act granted. More common was the provision of a hot midday meal at a small price. This option, which was encouraged by Clark and his predecessor Smith, was exercised in 23 centres.[877]

This general trend is reported by all the inspectors in the Southern Division. H.M.I. Millar confirms that in his district only Perth made full use of the powers conferred on the Board. With regards to the issue of ensuring proper clothing for pupils Perth supplied boots after letters were sent to parents of pupils found to be "imperfectly shod." In many cases the parents remedied the situation themselves. In others the Board supplied the boots and required parents to pay the outlay. Cases of parents being unable to cover the outlay were called before the Board for further investigation. With regards to meals, Perth supplied both breakfast and dinner, and the duty of determining necessitous cases was given to the Head Masters. However, by and large the dinners were taken advantage of by paying pupils.

Perth provided evidence that such action need not be expensive or undermine parental responsibility. Despite what may be interpreted as liberal activism by the School Board, the final expenditure was quite small: after deducting the amount recovered from parents the expense the Board actually incurred was less than one twenty-fifth part of a penny on the rates. Furthermore, those in charge concluded that when the powers of the 1908 Act were administered, as they had obviously been in Perth, with care and discrimination it tended to strengthen rather than weaken the sense of parental responsibility in those parents "who are careless without being utterly bad."[878]

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[877]Ibid., p. 11.
[878]Ibid., pp. 11-12.

Although a comparatively small number of Boards had active schemes, there was in a very real sense a realisation by inspectors and officials that feeding school children was an important form of prevention. Fraser claimed that the provision of a good midday meal was of even greater value than provision of medical treatment. He added that the "physique and the general health of the community" would be greatly improved if universal arrangements were made for feeding those school children who could not go home at midday or who have nothing to eat if they did go.[879] Yet time and time again this truth was met with the equally fervent belief that to do so would infringe on an area properly reserved to the responsibility of the parents. This certainly extended to other areas of parental neglect, such as Perth's distribution of boots.

It was in an attempt to address cases of child neglect, without transgressing parental responsibility that Edinburgh adopted its innovative schemes. First, as mentioned above the School Board involved charities to help identify the truly needy as a method of applying scrutiny. In a further effort to avoid the overlapping of agencies and the undeserving taking advantage of aid the School Board set up a Care Committee that met with individual schools and advised the Board itself on this issue.[880]

Furthermore, Edinburgh instituted another scheme for dealing with these issues under the sections of the 1908 Act which came into operation during the 1910-11 session. It was divided into two sections: child neglect and child relief. Neglect was classified as one of seven different types: insufficient food, insufficient boots, insufficient clothing, neglect of medical treatment, vermin of head, vermin of body, and condition of dirt. When any of these cases arose a strict procedure was followed. Cards of different colours were issued to the parents of the child: a white card for a first warning, and a red card for a second warning. Following a red card a certificate of neglect was issued to the Board, followed by a statutory notice to the parents and a summons to the Board. Finally, as a last resort the case could be transmitted to the Procurator Fiscal for prosecution of the parents. The white and red cards were issued by the Head Master, while the certificate of neglect had to be signed by both the Head Master and Medical Officer. If a parent was called before the Board they were only given a chance to explain the circumstances for the confirmed neglect, as it was no longer in question whether neglect had occurred. Mr. Peck, former Clerk of the city's

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[879]Ibid., p. 13.
[880]"Care Committees and School Feeding" EN Nov. 25, 1910, p. 1246

School Board and the one who compiled the report on Edinburgh, emphasised smaller towns could achieve good results with a much less complex organisation.[881]

In the following year Jamieson concluded that there were no grounds for the fears that schemes under sections 3(2) and 6 of the 1908 Act would "pauperise" communities. Rather he argued that:[882]

> the evidence appears to indicate that in localities where a well organised scheme has been put into operation under these sections of the Act there is growing up a stronger and healthier generation of children who may be less liable than their predecessors to fall into pauperism in later life...The number of parents who, being able to pay for their children's food, try to shift their obligations on to the public authority is not very large; and the applications for free dinners are so rigourously scrutinised that it is difficult for undeserving cases to escape detection.

As the period drew to a close the same general trends prevailed. The School Board of Edinburgh controlled the largest and most systematic undertaking for the provision of meals; at times feeding over 1,500 pupils for free. In addition, the Board decided to try the experiment of supplying dinners for *5d* . per week (five dinners) to such pupils as were considered by the Headmasters to be "semi-necessitous". The experiment proved successful, and tended to further reduce the applications for free meals. Meanwhile, smaller school boards remained very slow to move on the issue. Normally this was because they felt that the number of cases that fell under the sections were so insignificant as not to warrant action. Yet Jamieson believed that if these Boards did act it would be a boon to children falling under the provisions of Section 3(2) whose parents would be willing to pay.[883] In addition, the evidence mounted from the medical inspections of the positive effects of providing a midday meal at school. The annual report of Dr. Walker, the School Medical Officer for Leith, was typical:[884]

> The regularly recurring supply of warm food has a marked effect in maintaining the normal standard of weight and general health in cases that have been put under special observation. One hundred and sixteen children benefited by these meals during the session. This, out of a roll of over 13,000 scholars, shows the rigid supervision exercised in selecting suitable cases.

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[881]"Report for 1912." Jamieson, pp. 13-14. Quoting from Mr. Peck's report on Edinburgh.
[882]"Report for the Year 1913, Southern Division" HMI Jamieson, Reports, & c., issued in 1913-14. p. 18.
[883]Ibid., pp. 18-20.
[884]Ibid., p. 19.

This evidence and the limited, yet real, progress on the issue of school meals and providing for necessitous children, was coupled with persisting malnutrition. No longer was malnutrition restricted to the slums of the big cities. Cases of malnutrition were also occurring in rural areas, though due more to ignorance than to object poverty. Therefore, though the need for school meals was often viewed as an urban phenomenon the reality was much different. Unfortunately, a malnourished child was more likely to find a meal at an urban school than at its rural counterpart.[885]

The feeding and clothing of school children under Sections 3(2) and 6 of the 1908 Act, was associated with and most actively contemplated during difficult economic times. It rose to prominence during recession and depression, and faded from the public mind when circumstances improved. Great Britain and Scotland had by 1914 enjoyed a general prosperity for several years, and thus in general the issue was fading. By 1914 only the regional report from the Southern Division had mentioned the topic. Even in Edinburgh and Leith where systems were in place the machinery that existed was capable of dealing with twice the number of cases that had come forward. Nonetheless, the reports continued to warn managers and other school authorities not to ignore the issue and to make provision during the prosperous times, to avoid having to act in haste when they ended. By all accounts nobody was listening outside of those educational authorities which were already engaged in the effort.[886]

Finally, and maybe most importantly, the successful spread of medical inspection throughout the country made the issue of the role of the school in actual medical treatment all the more urgent. Although the topic had circulated in educational circles for many years it was still seen as being a rather novel idea, and was far from being either widespread or generally embraced. However, with medical inspection complete, attention turned to treatment. Its advocates saw a natural correlation between inspection and treatment. It was pointed out that the issue of medical inspection had as its natural precursor a lack of concrete information about the true health of Scottish school children. In much the same manner it had as a natural postscript some form of treatment. For while medical inspection had served a valuable purpose with regard to the former, it on its own did nothing about the latter.[887]

Yet this very premise could be called into question. Inspectors often reported very real progress even in the absence of medical treatment. Parents, especially poorer

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[885]Ibid. See also, "Reports for the Year 1913 & 14 on the Western Division" Fraser, reporting a similar situation.

[886]"Report for the Year 1914, Southern Division" HMI Jamieson, Reports, & c., issued in 1914-15. p. 19. NLS GEB. 5. See also, Report for the Year 1914 on Western and Highland Divisions, in the same volume.

[887]"Treatment and Medical Inspection." EN Dec. 13, 1912, p. 1155.

ones, were gradually losing their dread of the school doctor, and a good many of them "manifest their interest in the medical examination by attending in person." It was reported that the medical inspectors had a strong influence in inducing parents to secure treatment for their children. This was done in several ways including: the issuing of written notices advising them to see their doctor, the dissemination of instructions, home visits by a nurse, and simple oral advice.[888]

The official written notice to the parents was one of the most utilised. It was seen to have many advantages such as the fact that its issuing could be recorded, it could detail steps to be taken, and it was less expensive and time consuming than visits to individual homes or other personal meetings. In Renfrew 607 notices were issued in 1911 with 400 being attended to. While this percentage was on the surface encouraging the inspectors revealed that it did not reflect the disparity among schools. For example, in one school 100% of defects were attended to, while in another none received attention. Also, while a record was kept of the issuing, often no record was kept of the numbers receiving treatment. In Kirkcudbright there were 1,339 notices issued but no record of how many received treatment.[889]

Yet many inspectors maintained that a great deal of good had been done and many defects cured through these methods, without the school resorting to dispensing health care. It was further hoped that with a progressively healthier public opinion ameliorative action would be even more largely resorted to. This would have been welcome news to those, (such as Craik as demonstrated in the Parliamentary debates over school meals), who had contended that the ever increasing role of the school risked undermining the self-sufficiency of the Scottish race. In their minds the responsibility for childcare must be placed squarely on the shoulders of the parents.

However, the same inspectors admitted that the system possibly left too much to parents who were not inclined to seek treatment for their children. The inspectors divided parents into two distinct groups: the conscientious and the careless class who "do nothing in any circumstances." Equally, Medical Officers deplored the "indifference" shown by parents about the defective teeth or the defective eyesight of their children. Indeed, it was often the Medical Officers who most vocal in calling for progressive measures such as school clinics, not just for eyes and teeth (although this was the most prominent) but also for defects such as discharging ears, ringworm, and nits on the hair. Finally, many School Inspectors and Medical Officers concluded that

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[888]"Report for 1911." Fraser. pp. 37-38.
[889]Ibid., p. 38.

a sector of parents were simply unable to assume responsibility for medical treatment:[890]

> Owing to various causes many parents are unable to give their children the required treatment, and in these cases daily or weekly attention by an experienced nurse, under medical supervision, would be a great benefit.

Of course, it was actual treatment that was most important to the state of the country and the quality of education of the nation. It was observed that it was no essential service towards improving the national physique to merely tabulate statistics regarding height, weight, condition of teeth, ears, eyes, etc., unless something more were to be done. "In short, medical inspection however admirably carried through was only and could not but be merely a preliminary to medical treatment."[891] H.M.I. Fraser admitted that for some industrial counties such as Lanark medical inspection had not come "a day too soon", and they provided considerable statistical information regarding the prevalence of certain defects and diseases. Yet Fraser openly pushed the question of whether anything would be done about the now exposed defects in the health of the children.[892]

In addition, for many individuals medical treatment not only made sense, but was also a matter of efficiency. The dentist W. T. Elliot reported that large numbers of students suffered from comparatively remedial and preventable diseases of the teeth and mouth. Left untreated they could lead to serious gum diseases and problems with digestion. He described it as "an economy" to spend money on treating these problems easily, and pointed out the programs in France and Germany that had treated such ailments for many years.[893]

The main difficulty was that despite the seemingly natural postscript of medical treatment there was no legal mandate for it. While every Board under the 1908 Act was obliged to undertake and empowered to pay for the general examination and supervision of the physical condition of all children in the schools under its charge, no such obligations or powers were conferred on School Boards for the treatment of even common defects revealed by inspection. Most accurately believed that additional legislation was necessary before any form of treatment became the corollary to inspection.

The necessity of additional legislation was confirmed when the Glasgow School Board moved for legal clarification of its ability to carry out medical treatment.

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[890]Ibid., pp. 38-39.
[891]"Treatment and Inspection." EN p. 1155.
[892]"Report for 1911." Fraser, p. 37.
[893]"The Treatment of Teeth in the Elementary Schools in Relation to Public Health." EN Jan. 14, 1910, p. 38.

It brought before the Court of Session the question of whether a School Board was empowered under the Education Acts to use money from the School Fund for the purpose of medical treatment for two specific groups of children. First, those that came under the elastic description of 'neglect' in Section 6 of the Education Act of 1908. Second, those coming under the broader terms of Section 4 of the same Act. In other words, could a school board utilize funds for treatment following on from medical inspection which was funded?

The judgement handed down by the court and presented by the Lord President was disappointing. It ruled that a School Board was not empowered under Sections 3, 4, or 6 of the Education Act, 1908 to use the School Fund for medical treatment. The Lord President wrote in his leading judgement, that if the legislature had intended to include "treatment" as a necessary corollary to medical inspection, the legislature would have said so "in quite definite and explicit terms, and would not have left it to the Courts to decide."[894] The decision included both medical and dental treatment, and was a strict interpretation of the Act so that treatment could only be included if the actual word appeared. The court finished by saying that the Board must find powers through an Act of Parliament.[895]

Yet this did not impede the progress of treatment entirely. Indeed, even as the Court was hearing Glasgow's case the city, and Edinburgh as well, had already set up more than one treatment centre. They were able to do this by virtue of a Treasury grant allocated to Scotland that was equivalent to a sum allotted to England for the purpose of medical treatment. The sum of £7500 was raised not from the rates, but from taxes. This money was in turn subdivided between School Boards with Glasgow getting the largest share (£1250) and Edinburgh the next largest amount (£850). However, it was stipulated that the sum had to be spent before 28th February 1913. Hence there was some haste in making local arrangements, and there was no provision for on-going treatment

The situation in Scotland was very different from the one that existed in England; a difference that placed Scotland at a distinct disadvantage. In England local education authorities were empowered to use the School Fund for what was conveniently termed the "school clinic." Thus, the decision of the Inner House settled an important, yet nonetheless unfair and discriminatory point. While authorities in England were allowed to utilise both local and Imperial funds for the purpose of treatment following inspection, in Scotland the School Fund could not be used and all funds for the purpose had to come via the Treasury. Disappointed at this state of

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894"Treatment and Inspection." EN, p.1156.

895"'Medical Treatment' Court of Session Decision." EN Dec. 13 1912, p. 1159.

affairs, advocates questioned the utility of spending additional funds on inspection: "until the law of the land is altered, it is useless to have an elaborate system of medical inspection without adding thereto a modicum of "treatment."[896]

This legal impediment was removed by the Education (Scotland) Act, 1913. The wording of the Act was a direct response to the ruling of the Court of Session. It made clear that if as a result of medical inspection or otherwise it was brought to the attention of a School Board that a child within their district was in need of medical (including surgical and dental) treatment, the Board was not only permitted but required to make provision in the case of necessitous children. In addition, it clarified the wording of the 1908 Act in terms of medical treatment coming under the same terms as providing sufficient and proper food or clothing in Section 6 of the 1908 Act.[897]

Initially a sum of £7,500 was placed on the Estimates of the SED for the year to be allocated in aid of approved schemes. A provisional allocation of £7,275 was made after consideration of the schemes submitted by School Boards. With these first grants much was reported accomplished by way of actual treatment of defects and ailments and in the supply of equipment for carrying out work on a systematic scale in future years. The grant was applicable only to the cost of dealing with pupils deemed necessitous, but the scope of operations was not confined to these cases. Children in less extreme circumstances were admitted to treatment after payment of a suitable fee. This followed the same principle as meals provided by some School Boards which were free for necessitous children, but also enjoyed by a number of semi-necessitous children who got their dinner at a reasonable charge.[898]

The School Boards realised that the entire range of ailments presented could not be effectively dealt with given the resources available. Most, therefore, chose to concentrate on "some special class or classes of defects." Typically these were ones dealing with poor teeth and eyesight. It was found that these ailments could be most thoroughly treated with the money available. In larger towns and cities "where the number of cases involved action on a large scale" clinics were often established and staffed. Many of the smaller School Boards, typically those in outlying areas, found that the most efficient use of money lay in forming a connection with a local hospital or dispensary. The hospital undertook part, or all, of the treatment and was usually paid by the School Board at a flat rate per number of cases sent to them.[899] Though

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[896]"Treatment and Inspection" EN. p. 1156.
[897]"Education (Scotland) Act, 1913" Section 3. Reprinted in Roxburgh, Law of Education in Scotland. p. 79.
[898]"CCES Report for 1913-14." PP 1914 XXIX, p. 16.
[899]Ibid., pp. 16-17.

complete statistics were not available, the SED released the statistics in Table 8.5 as indicative of "roughly the number of children" dealt with between the passing of the 1913 Act and the end of the 1914 session:[900]

Table 8.5: Numbers of Children & Ailments Treated	
Minor Ailments	1,750
Defective Vision	3,650
Defective Teeth	5,200
Adenoids, Enlarged Tonsils &c	800
Skin Diseases	600

Despite the zeal with which nationwide medical inspection was pursued, and the lengths some Boards went in the name of treatment, the issue of physical education had not only made little progress, but had also fallen in importance by the end of the period. Several divisions, including the Southern Division in 1911, found themselves without an Inspector of Physical Training; the office often remaining vacant for a year or more. In the cities confronted the same problems in 1914 as earlier: a lack of space, and a lack of facilities for carrying out exercise. However, where it was present more trained instructors had been employed. Special mention could be made of Linlithgow County Council which employed three instructors, Leith which made great strides to put physical training on a good footing, and Bathgate Academy, Bo'ness Academy, and Bathgate public school where good equipment was also provided. Yet, overall Inspectors still reported regular and chronic defects in not only provision, but also the form of exercise when it was provided. H.M.I. Walker summed up the findings when he remarked in 1911: "while the exercises have often a specious appearance of merit, they are frequently worthless."[901]

However, the general trend was one that no longer emphasised physical training. By 1914 none of the regional reports, including the one for the Northern and Highlands Divisions, devoted any space to the issue of physical training. The accounts that do exist suggest this was not because the issue of physical exercise had been thoroughly met, rather it is more likely that it had simply lost its appeal after years of attention. The one exception to this trend appears to be in the secondary schools of Scotland. Struthers reported steady progress in the area of physical education in the secondary schools, and this was collaborated by observations and reports of the medical inspectors.[902]

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[900]Ibid., p. 17.
[901]"Report for 1911" Jamieson, pp. 32-33.
[902]See generally, "Report for 1913, Secondary Education" Struthers, Secondary Education (Scotland) 1913-15 Reports. pp. 59-60. Also, Reports for the years 1914 & 1915 in same volume.

Part V: Conclusions

By 1914 Scottish schools had made great strides with regards to the health and welfare of pupils. Progressive politicians and educationalists had prevailed over those that believed extending the province of school action would undermine parental authority, and the independence and self-sufficiency of the Scottish race. It can only be concluded that the realm of the school in pupils' lives had changed significantly, although all concerned were not converted. Many still argued that the developments of the previous decade encouraged parents to neglect their responsibility and allow the school to assume them.

There is no doubt that the greatest progress was made in the area of medical inspection of school pupils. After the 1908 Act a network gradually spread throughout the country until it became a universal feature of school life in Scotland. The inspections provided long needed information on the physical condition of the youth of the nation, but it also raised several issues to prominence. Some, such as the cleaning and disinfection of schools received attention and amelioration, though it can not be concluded that this was thorough and universal throughout the country. In addition, new school facilities were constructed with greater attention to hygiene issues such as ventilation, natural light, and ease of cleaning. Others, such as the feeding and clothing of school children were addressed in a more sporadic manner. Left to the discretion of individual School Boards, feeding and clothing was susceptible to the attitudes and convictions of local authorities. The more progressive authorities such as those in Edinburgh and Perth addressed the problem in an aggressive manner. Those authorities that subscribed to a more conservative philosophy such as in Fife during the miners strike in 1911, believed that feeding was the rightful responsibility of the parents. It can be concluded from the evidence that even where "progressive" feeding and clothing programs existed there was employed a strict scrutiny of applicants, resulting in only the most necessitous children receiving meals for free and others being fed at a small fee.

The area of medical treatment in the schools faced greater difficulties. Although inspectors regularly urged treatment as a postscript to medical inspection it had no legal mandate until 1913. Prior to this progressive school boards employed innovative schemes to achieve results. Central to these efforts was pressing the parents to treat the ailments revealed by medical inspection. Once treatment was put on a solid legal footing in 1913 it made significant though limited progress. It should not be supposed that those opposed to school medical treatment were simply the traditional element that feared the deterioration of personal responsibility in Scotland. Though it

was not discussed in detail there were forces outside of the educational establishment that opposed treatment. Most notably, the medical community in Scotland was less than enthusiast at the prospect of losing revenue to comprehensive school clinics or other programs that would not be operated to garner profits. However, it can be concluded from the limited efforts and statistics that not only was there a need to be met, but that when met it led to a positive improvement in the education of the child. Though the evidence is limited, there is nothing to suggest that efforts in school medical treatment resulted in a mass exodus of children from private care. Rather, it tended to reach those children whose families were either so poor, lazy, or ill-informed that the child would otherwise not receive care.

The issue of physical training seemed to have made the least progress during this period. The advocation of organised and systematic physical training, especially military drill, truly hit its high-water mark during the years after the Boer War. Once the direct threat of war faded, the issue also seemed to fade. It was a minor issue during the debates over the 1908 Education Act, and by 1914, although war loomed, it was practically absent. Those that advocated scientific and systematic training seemed to have lost. Generally, schools continued to suffer from a lack of specially trained teachers and facilities that made a universal system impractical. However, more practical impediments should not be ignored. A lack of time in the school schedule continued to prevent devoting the recommended number of hours to such activities, and teachers preferred organised games and sport over physical drill. It is not improbable that this was due to the simple fact that pupils preferred these activities and they were more easily implemented.

It can also be concluded that the ideals of National Efficiency lay at the foundation of the progress made in the health and welfare of Scottish children. By 1908 the basis for advocating such issues had moved away from the needs of the military and empire. Instead they were supported as a means of supplying a healthier and more physically fit work force, fighting the negative effects of industrialisation and urbanisation, and the more sublime objective of raising the general welfare of the country. The 1903 Royal Commission heard volumes of testimony from army and military personnel on topics ranging from the use of the Cadet Corps in physical training to future military needs.[903] Yet by the end of the period the military was rarely consulted, and those adding their voice to the debate were more likely to come from the medical and educational communities or work in some capacity with the poor. Furthermore, a direct correlation was made between the health of the child and quality

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[903]See, for example, "Royal Commission", testimony of Capt. G. A. Armytage pp. 80-86, and Major-General Sir Ian S. M. Hamilton pp. 507-512.

of education. Addressing the problems of hunger and other physical ailments were perceived as preliminary to providing effective education. The general decrease in absenteeism by the end of the period seems to support this argument. Furthermore, the spending of money in the field was seen as an efficient use of funds as "the health and physical fitness of the people is the most valuable asset of the nation."[904]

Much as other educational issues were pushed forward by the spectre of international comparison and competition, so to was the issue of students' health and welfare. Authorities in Scotland, and the whole of Britain, were keenly aware that other countries had taken a more progressive approach, and taken it earlier. In 1910 it was written that so much had been done in other European countries and America that "the national honour seems almost at stake."[905]

Despite the progress that was made much remained to be done in order to achieve all that the advocates desired. In addition, as the period drew to a close it became apparent that the school could only do so much. The Royal Commission Report had revealed the connection between the condition of housing (as representative of social status) and the physical health of children. Despite all the laudable progress that had been made school officials and inspectors were still confronted by this reality over a decade later. H.M.I. Fraser put it bluntly when he said that some of the defects would persist despite all efforts of the school "until housing, feeding, and housewifery generally are improved." He suggested extending the powers of the Sanitary Authorities, and a recognition that while visits by medical inspectors often shown light on "dark places", teachers and other authorities must be continually pressed to do something about the conditions once revealed.[906] In addition, after specific inquiries it was consistently found that the employment of children in out of school hours was of a character that contributed "very materially to weak health and inaptitude for study."[907] Thus, the issue of employment of children once again materially effected their performance in school. However, these conditions that lay outside of the reach of the school can not diminish the great progress that was made, and the extension of the role of the schools in the lives of the Scottish people.

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[904]"The Health of the Nation--An Appeal" EN Feb. 25, 1910, p. 198.

[905]"Mental and Physical Factors Involved in Education." EN Aug. 26, 1910, p. 816. (The Report of the Committee appointed to enquire into and report upon the methods and results of research in the Mental and Physical Factors involved in Education).

[906]"Report for 1911." Fraser, p. 37.

[907]Ibid., p. 39. See also, Reports for the years 1912, 1913, & 1914 in successive volumes of reports under GEB. 5., which reported consistent findings in later years.

Chapter 9: Conclusion; Success or Failure and the Bigger Picture

It is difficult to assess the success or failure of the developments in Scottish education addressed in this paper. If one were to hold the ideal as the measure of success, then the answer would surely be that the progress made failed to reach the ideal. In addition, one would also have to determine whose ideal should be considered. For example, in the realm of technical education many educationalists held the German model of a national system of technical "high schools" as the standard to be achieved. Certainly the country failed to accomplish this objective. However, it is not always appropriate to hold out the best possible scenario as a sign of success. Therefore, it is better to take a broader view in the assessment of success and failure. Equally fundamental is placing the areas and topics of this study into a wider historical context. How, for example, did developments in Scottish education mirror or diverge from developments in England and other European countries? In addition, how does this study fit into the larger historical debates regarding the growth of government, national efficiency, and British economic decline (or more appropriately, concern over decline).

One of the broad themes that runs throughout this study is Craik's and the SED's desire for more central control over the provision of education to the "industrial and commercial classes" of Scotland. It was most prevalent in the debate over commercial education, Continuation Classes, and Central Institutions. By and large the SED was successful in gaining a degree of central control and direction. For example, through Article 87 it was able to set the terms of Central Institution status, and gained a good deal of control over the curriculum of these institutions; especially in terms of establishing trade classes, the structure of the curriculum, and attempting to institute more day classes. It also encouraged greater co-operation and coordination between the Central Institutions and the Continuation Classes of the various school boards. Certainly, not all boards entered into agreements with Central Institutions, but those that did slowly adjusted their efforts in order to create a "natural bridge" between the two. Thus, the SED gained a level of influence over the work of the Continuation Classes, something that had long eluded it.

This shifting authority and attempts to centralise control has an impact on the larger question of the growth of government and the extension of government authority in Scotland and Britain as a whole since the 19th century. In the decades after World War II interest in the growth and development of government, especially in the years from about 1780-1914, has grown not only within the historical community, but also amongst those involved with the public sector. The central

subjects have been the sources of growth with regards to the expansion of government activity and the development of formal structures. Several theories have been put forward. For example, O. M. Macdonagh offered the thesis of 'self-generating bureaucratic growth'. He postulated that from the late 19th century onwards the growth of government has had a life of its own, expanding naturally and yet uncontrollably into additional areas of the lives of British citizens. In this sense bureaucracies spawn more bureaucracy, and more, and more.[908] In contrast, Richard Johnson theorised that much of the growth in government in the 19th century (especially early in the century) was the result of new problems mostly associated with industrialization. Thus, government moved to meet needs that had not been present previously, or into areas that had not required government intervention before the advent of industrialisation.[909]

Gilbert draws conclusions for late 19th century growth based on 'the new philanthropy' which was derived from changing views of social distress and poverty, combined with a more robust agitation by the poor themselves which began to influence reformers in the last quarter of the century.[910] Looking specifically at the birth and evolution of national insurance he doesn't believe that it came from a conscious desire to find a new philosophy of poverty, but rather inherent changes in British economic society. Agitation by the poor was spurred by the growth of socialist ideas and the appearance of politically motivated leaders of labour after the grant of household franchise in 1885. Changing economic conditions resulted in a new awareness among the well-off who found themselves in greater contact with the poor. They found that the old assumptions that the poor were lazy and improvident were not true. Rather, industrial society "did not distribute its rewards equally, or according to effort." More fundamental, the early Victorian belief that the British system would lead to unending progress was met with the realization that the plight of the working class was not getting better; indeed in many ways it was getting worse. However, this new philanthropy had as its foundation "a suspicion and fear of the lower classes."[911] Gilbert's 'new philanthropy' is directly related to Belchem's 'consciousness of guilt' over problems of the poor and urbanisation (p. 15).

Both these late century developments impacted the motives of the National Efficiency movement as discussed in Chapter One. Searle (p.16) viewed the National

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[908]Sutherland, G. (ed.) *Studies in the Growth of Nineteenth Century Government.* (London, 1972), pp. 1-3.
[909]Ibid., p. 110.
[910]Gilbert, B. B. *The Evolution of National Insurance in Great Britain; The Origins of the Welfare State.* (London, 1966), p. 13.
[911]Ibid., p. 15.

Efficiency movement as an attack on all things that "handicapped" Britain in relation to her foreign rivals. The issues that the SED addressed during this period were just these 'handicaps': low levels of student health, poor technical and commercial training, fewer years at school, limited educational opportunities for working-class children, etc. In addition, the desire to address the 'whole student' was in line with Rosebery's view of national efficiency as a "national fitness" encompassing the physical, education, etc. (p. 17).

Finally, Gillian Sutherland posits that the state acted only when all other avenues of voluntary, local, or individual action had been exhausted. Therefore, according to Sutherland, the State adhered to a philosophy of laissez-faire[912] for as long as possible before acting; often reluctantly. Yet, which ever school of thought is utilized to examine growth, Sutherland points out, it is normally interpreted with a negative connotation. Rather than 'state action', it is more commonly termed 'state interference'. This stands in contrast to continental models, especially those of France and Germany, where there was an expectation that a permanent government bureaucracy would act as a positive force.[913]

Several conclusions can be made with regards to these theories and the reforms made by the SED during this period. First, there is some evidence of Macdonagh's self-generating growth. This was particularly true with regards to the expansion of the role of the school into issue of student's health and welfare (discussed in greater length below). Second, with respect to Gilbert's 'new philanthropy' and Belchem's 'consciousness of guilt' there is ample reason to conclude that at least some of the reforms were in a response to these general conditions. While both Craik and Struthers employed the rhetoric of economic necessity to support expanding the educational 'track' for the working-class, it was also done for social reasons. The 'loafer' idly standing on the street corner would be better off devoting his time to continuation classes. However, there is little reason to embrace Gilbert's idea that there was a new vision of the reasons for social distress. Many still saw the poor as lazy, or having an inordinate love of sport. Extended education was to be thrust upon them for their own sake and for the sake of the nation. Urbanisation had created new problems and provided an environment in which they were more evident. Thus, it was in the larger cities of Edinburgh, Glasgow, Dundee, etc. that calls for continuation classes were most adamant.

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[912]See also, Taylor, A. J. *Laissez-faire and State Intervention in Nineteenth-century Britain.* (London, 1977).
[913]Sutherland, *Nineteenth Century Government,* p. 10.

Gilbert's assessment of a changing view of industrial society that did not "distribute its rewards equally, or according to effort," and a realization that the plight of the working class was not improving is directly relevant to this study. However, it took the form of an appreciation for the changing nature of the industrial work-place. For example, the death of the apprenticeship system in favour of methodical training in individual tasks led to calls for the school to assume the role once held by the old system of apprenticeship training. The abundance of 'dead-end' employment (or 'boy labour') resulted in demands for the extension of the school leaving age, limitations on youth employment, and the expansion of post-primary education for this class of youth. In social terms, the exposure of the toll factory work often exacted precipitated moves to not only limit work, but also reform curriculums so that they would have a more 'civilizing' influence. This was particularly true of female employment in Dundee.

Sutherland's theories ring most hollow with regards to this study and for Scottish education. First, the SED, Craik, and Struthers were all pro-active government entities. Their desire for government action was not tempered by the need to explore and exploit all avenues of voluntary effort. Rather, their actions were tempered by the desire of local authorities for control and the Scottish tradition of local control. Thus, much was left to local decision making, and in turn most localities preferred to adopt voluntary methods. This is most obvious in the realm of continuation classes (discussed below). Second, while government action was often viewed in a negative context, especially by members of the EIS, much of this resentment was based on the fact it was coming from a central authority outside of Scotland. Local initiatives which constituted the same level of intervention or action were not opposed in the same way. By the period of this study laissez-faire was dead. The thesis shows that SED action was based on a consciousness of new or newly revealed social problems as well as more direct economic concerns that justified state action/intervention, and the more general 'extension' of the school.

The 'extension of education' entailed building of schools, providing for better facilities, raising levels of attendance, but it also meant extending the authority of the school; specifically the extension of the school into the arena of social welfare. Analysing only the progression of school responsibility in the areas of health as discussed in Chapter 8 would be too narrow an assessment. Many school powers and functions were created, often under the rubric of National Efficiency, that had a more educational connection, and much of the reform of the curriculum itself had at its root the motivation of welfare. A good example was the creation of 'employment bureaus' and the pressure on schools to take a more active role in the life of students after they

had left school. Schools became responsible for not only imparting knowledge while a child was in attendance, but also at least partially responsible for the employment success or failure of a pupil after they were outwith the schools traditional control. Nor should it be forgotten that the Supplementary Classes and Continuation Class system were often used and continually advocated as a means of remedying social ills, rather than imparting purely academic skills.

Yet the most obvious such extension was in the area of children's health, with feeding and medical treatment being the most contentious issues. It has been the contention of this work that while those advocating these policies may have had altruistic motives or a sincere sense of sympathy for the plight of the less fortunate, the policies themselves were always justified on the grounds of educational efficiency. In this sense, although they certainly tested the limits of the term, they were not considered to be 'welfare' as such. Rather, they were seen as a natural additional function of the school in order to ensure that students were able to learn to the best of their ability. This was true in England as well where these functions had a longer history. Margaret MacMillan, a pioneer of school meals in Bradford where she worked with the Independent Labour Party, argued that it was a waste of money to "try and educate a hungry child, let alone a starving child."[914] She felt that it was logical that if the State compelled a child to go to school, but did not compel a parent to feed that child, then education was "less of a boon than an outrage."[915]

Sir Robert Morant, the Permanent Secretary of the Board of Education, advocated not only school meals but also the school's greater devotion to the overall physical condition of the child. In supporting his outlook Morant claimed in 1906 that what subjects were taught and how much they were taught did not matter "anything like so much nowadays as attention to the physical condition of the scholars and...to the physiological aspect of the school."[916] In communications with MacMillan he recognised that efforts in this regard had to proceed carefully, and could only be accomplished if they could "avoid raising a public hubbub" against the work.[917]

In his bid to implement universal medical inspection of school children in England Morant knew that it would reveal such an amount of disease and defect that the government would be forced to act. Indeed when he introduced medical inspection under the Education (Administrative Provisions) Act of 1907 he not only foresaw what would happen, but meant it to happen because it is asserted he knew that there was

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[914]Hay, J. R. *The Development of the British Welfare State, 1880-1975.* (London, 1978) p. 58.; quoting from Mansbridge, A. *Margaret MacMillan, Prophet and Pioneer* (London, 1932).
[915]Ibid.
[916]Gilbert, *National Insurance,* p. 129.
[917]Ibid.

little chance for a legislative mandate for treatment without inspection. B. B. Gilbert claims that it was Morant's actions that broke down the governmental barriers, and "set in motion a vast social revolution probably without then foreseeing the ultimate result of his action."[918]

In this regard it should not be forgotten that although the SED was instrumental in forging a national system of school medical inspection, Craik himself did not share Morant's enthusiasm for the school assuming additional authority such as feeding. As an MP he was firmly of the belief that to do so would undermine the responsibility of parents and as such undermine the self-sufficiency of the Scottish nation (pp. 263-264). When Scottish school boards did move into the realm of direct social welfare such as clothing pupils or providing meals, it was done with the utmost scrutiny to avoid abuse of the system and insure that parents when possible were held accountable. Morant had foretold that one avenue of new government operation would inevitably led to another. When medical inspection was accomplished, it was only logical that medical treatment should follow. After all, what was the purpose of exposing defects if there was not a method to remedy them? Indeed, was not the money spent on inspection truly a waste if treatment did not follow? This same logic was present in the debate over feeding. As Macmillan had advocated, feeding pupils was the natural outgrowth of compulsory attendance. In addition, if feeding was seen as such, why not clothing? Thus was the march of the enlargement of the role of the school, especially in the period after the 1908 Act; a progression many described as "the natural" evolution of the school. All these moves were justified on the grounds of educational efficiency. All were called into existence in the name of the school being able to fulfil its role of effectively educating the entire nation, rich and poor. Yet in Scotland such elaborate safe guards were established against abuse of the system that it was proposed that only the "truly needy" ever received such aid without some fee.

The issues surrounding the broadening of the scope of the school into issues of health and welfare have natural implications for the wider historical analysis of central versus local control. Health and welfare reform was one of the most successful areas for the SED. By the end of the period a national system of medical inspection for school children existed, and greater attention was being paid to the sanitation of schools. Indeed, the sheer speed of the establishment of the former goes some way to validate the SED's conviction to central control. It is doubtful that such a system would have been achieved, without considering how quickly, if it had been left to the sole discretion of the school boards. In addition, there is every reason to conclude that the presence of medical inspection not only revealed physical defects, but also went a

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[918]Ibid., pp. 129-9; see also, Hay, *Development of Welfare State*, p. 60.

long way toward encouraging and securing parental attention to the problems. In this respect much was left to the initiative of school boards. For example, Perth and Edinburgh instituted programmes beyond the legal mandate to address these problems. Glasgow also openly challenged the restriction on treatment; ultimately leading to the 1913 Act. The only failures would be for those individuals that advocated national systems of physical training, and feeding.

The issue of central versus local control was the one debated at the time. Concern over government growth and its historical analysis is more a late 20th century development, and historical interest in it certainly surged in the years after World War II. W. Thornhill, however, postulates that the local versus central issue is something of a *non sequitur*. He states that there was no "golden age" when local government was more important and more active than the national government. Indeed, Thornhill points out that "Politically and administratively, the two have never been separate and independent institutions."[919]

Johnson states that the Education Department south of the border fit the model of those departments created in the 1830s as a response to the problems, demands, and social change of industrialisation.[920] The much later creation of the SED is not as easy to characterize. Its original aim was to centralize to some degree and thus simplify education in Scotland by taking it out of the hands of Churches and other private administrators, and transfer to a multitude of popularly elected school boards the work of organizing and administering education for the country. The presumption that control by hundreds of school boards would simplify matters was somewhat unfounded. In the midst of the political and social debate regarding national efficiency Craik took the SED in a new direction of centralising control in the department rather than the multifarious school boards. Key to his thinking was that only through this move, the application of a single strong guiding hand, could a truly efficient system of education that addressed the needs of all sectors of society be achieved for Scotland. The permanent nature of his position made him ideally suited to exert influence in the area as Secretaries for Scotland, MPs, and members of popularly elected school boards came and went. As such Craik, possibly more so than Struthers, was of the perfect temperament for the job. He has been described as "punctiliously correct at all times, aloof, authoritarian, and ruthless when necessary", as well as unwilling to reconsider decisions once made and never admitting to a mistake.[921]

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[919]Thornhill, W. (ed.) *The Growth and Reform of English Local Government.* (London, 1971), pp. 1-2.
[920]Sutherland, *Nineteenth Century Government* , p. 110.
[921]Bone, T. R. *School Inspection in Scotland; 1840-1966.* (London, 1968), p. 119.

However, several areas, especially Continuation Classes, remained within the province of the School Board. While the 1908 Act mandated that boards make provision for such classes and institute trade classes, the vast majority of decisions remained outside of the direct control of the SED (including the character of trade classes). For example, compulsion was at the discretion of the boards, as was the methods employed to attract students and maintain attendance. Progressive school boards such as Edinburgh's were an exception, and few went to such lengths to attract students. Furthermore, Glasgow was the only large school board that experimented with compulsion. It is fair to conclude that while on the one hand there were initiatives carried out by some school boards, the 'average' local authority required some degree of intervention to stimulate action.

Indeed, Continuation Classes were the great enigma for the SED. Initially envisioned as an avenue to provide practical studies in commercial and technical subjects leading to the higher work of the Central Institution, they never lived up to this ideal. Despite the great amount of progress made many individuals still viewed these classes as a method to address social ills, discipline rather than educate, or simply occupy the time of adolescents during the years that they were most at risk from the evils of the street and the negative influence of the factory. Yet these views were not unique to Scotland. Paul Robertson in his study of technical education in the British shipbuilding industry revealed that throughout the period (1863-1914) education for artisans was regarded as having as much "a social as a vocational mission", and was lauded for its social "uplift." In England, Sir William White a long-standing advocate of technical education perceived evening schools almost as correctional facilities. He declared them to be one of the "glories" of the country for the hundreds of young men who through evening classes had "'been helped to fight evil habits", whose minds and bodies had "'been wholesomely occupied'", and who had been "'saved from becoming Hooligans.'"[922] This position should, however, not be terribly surprising. David Rubinstein postulates in several of his works that the acquiescence of the dominant middle and upper-classes for <u>any</u> type of extensive system of education for the working classes was based in large part on the belief that education was "a necessary civilising factor" for the "growing numbers of ignorant and violent people discernible in the new industrial cities."[923]

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[922]Robertson, Paul L. "Technical Education in the British Shipbuilding and Marine Engineering Industries, 1863-1914" <u>The Economic History Review.</u> Vol. XXVII, No. 2, May 1974, p. 227.

[923]Rubinstein, D. *School Attendance in London; 1870-1904; A Social History.* (Hull, 1969), p. 2. See also, Rubinstein, (ed.) *Education and Equality.* (London, 1979); Rubinstein and Simon, B. *The Evolution of the Comprehensive School; 1926-1972.* (London, 1973).

Considering this general perception of the role of Continuation Classes maybe it should not be unpredictable that they did not reach the lofty academic heights set for them. Nearly 15 years after Craik stated that the elementary work of Division I was to be a temporary measure there was no sign that they would not be required. Purely technical work made up only a small proportion of the work done. Even commercial studies that prospered in the Continuation Class system did so in less than an ideal manner. Most students in this area attended one or two classes such as book-keeping or shorthand and never returned. Nor should the failure of the Technical and Commercial LCs be discounted. Though mistakes were certainly made by placing them on the level of the secondary school Leaving Certificate, there is no evidence that they would have had more success in the Continuation Classes.

The only conclusion that can be reached is that success in the area of Continuation Classes were on a local rather than national level, and this tends to discount in part the theory of 'efficient central control'. Localities such as Edinburgh and Leith made tremendous progress in all areas including raising levels of attendance, retaining students, co-operating with businesses, and coordinating their work with that of the Central Institution. The general raising of enrolment obscured the fact that it occurred disproportionately in areas with active school boards. In addition, only Edinburgh went to such great lengths to supply practical studies, though this was more often in the form of trade classes rather than technical education. The workshops at Tynecastle were unique in size and the scope of work carried out, but can only be qualified as a success in terms of providing practical trade classes.

In contrast Central Institutions were a national success, and this in turn lends credence to the desirability of more centralised control. With a degree of central control the SED was able to fashion a truly national system of colleges aimed at the working classes throughout the nation. The best, such as Heriot-Watt and the Royal Technical College, not only did fine work, but also gained funding for high quality laboratories and other facilities. In addition, the co-operation of these two institutions with their prospective universities led to a general raising of the level of work, and some raising of the prestige of their endeavours.

The goal embraced by Dyer and others that the Continuation Class system and, to a lesser extent, Central Institutions should replace the loss of the traditional apprenticeship system largely never came to pass. Though attributable to a variety of reasons connected with the new methods of production, two reasons stand out. First and foremost was the attitude of businessmen. In the conclusion to Chapter 3 it was stated that businessmen and industrialists were often seen as the enemies of educational progress. At the end of the period this remained the case. However, one

should not forget that Craik and the SED were not always receptive to the input of those businessmen who were active. On the issue of commercial education (Chapter 3) Craik and the SED seemed to take a position that they possessed the requisite expertise without considering the position of businessmen. In addition, on the issue of certificates, their devotion to central control led them to discount initiatives on the local level; while their Commercial and Technical Leaving Certificates ultimately failed. This often aloof position may have been one of the reasons that businessmen, when approached, chose not to cooperate fully with the initiatives of the SED.

One should not ignore the very real strides that were made by active school boards in gaining the co-operation of businesses. However, it could not be considered a national policy. The ideal of, again, a German model in which young workers divided time between work, classroom education, and on the job training never came to pass. It should not be supposed that German employers were naturally more inclined to reducing work hours in favour of education. Legislation mandated it; a step that was never taken in Scotland. However, in Scotland Continuation Classes never assumed the role of apprenticeship training because in many areas they were not designed to do so. Rather, under many school boards they were designed to get working class youth off the street, teach them the responsibilities of citizenship, cultivate in them a "rational" enjoyment of their "leisure time", and correct or continue elementary work. The sheer numbers that left formal day school education without meeting the basic level of the Merit Certificate diverted the system from serving a higher function.

However, for many individuals the Continuation Classes were considered best utilized not for technical or commercial education, but rather for exactly the purposes described above. For this contingent the Continuation Classes, with the exception of rural areas, were indeed a success. Increasing numbers of enrolments through to the end of the period indicated that more and more young people were being reached. Slowly the proportion not in some type of further education after leaving the day school fell. It did not matter if the students were in domestic classes learning the vagaries of being a good wife, or in chemistry. After all, this group believed that only a very small proportion would ever have any practical use for technical or commercial education in their life's work, and it would be "wasted" on the remainder.

While not exclusive to the area of Continuation Class these attitudes and educational 'theories' lead directly to the issue of the social segmentation of the educational system. Most prominently discussed in The Rise of the Modern Educational System edited by Müller, Ringer, and Simon this historical analysis postulates that changes made in the structure of the education systems (especially in

secondary and higher education) of England, France, and Germany during the period from 1870 to 1914 were not shaped by "objective 'needs' of industrial-technical economies." Rather, while recognising important interactions between the educational and occupational systems, the national systems were changed primarily for their "social effects" and the changes in each country resulted in "hierarchical systems of education that tended to reproduce and to fortify the class and status structures of society."[924] Despite Scotland's demographic and economic proximity to England any analysis of Scotland's educational system and the structural changes that it underwent concurrent to the other three countries is noticeably absent. The two most prominent themes of the above study are 'systematisation' as discussed by Detlef Müller and 'segmentation' as introduced by Fritz Ringer. A consideration of these two themes as they relate to the research of this thesis is appropriate.

In outlining his thesis of 'systematisation' Müller draws from the structural changes in German secondary education between 1870 and 1920. However, he makes more general conclusions regarding the three educational systems under consideration. According to Müller the process of systematisation occurred in three phases. First, there was 'system emergence' which refers to unrelated educational developments in autonomous areas. This is followed by the 'constitution of the system' which refers to the organisation of the parts of the system and their "functional articulation and classification." Finally, there occurs 'system complementation'. This last phase is the "rounding-out" of the system through changes and notifications of the existing forms of which it is made. This is accomplished through the integration of areas, or through the establishment of new institutions which are added to the system to fulfil objectives not envisioned when the system was constituted.[925] For Germany Müller concludes that this process happened earlier than in other Western European countries and the United States:[926]

> the German state at the beginning of the nineteenth century initiated a development in which collections of diverse school types and vocationally oriented institutions were transformed into an education system that has become paradigmatic for modern industrial societies.

In the first phase of system emergence an "autonomous, internally directed, differentiated and comprehensive apparatus of educational administration" was able to enforce several traits in the structure of the system. These included the system of sequential age groups instead of a flexible criteria of promotion and the standardisation

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[924]Müller, K., Ringer, F., & Simon, B. (eds) *The Rise of the Modern Educational System; Structural Change and Social Reproduction 1870-1920.* (New York, 1987) p. xii.
[925]Ibid., p. 17.
[926]Ibid., p. 18.

of the length of school courses. During the phase of system constitution regulations (most notably in 1882 and 1892) extended beyond individual school types to order the structures, functions, and qualifications of all schools in a coherent manner. Most significantly, the comprehensive character of the secondary schools was replaced by a "vertical differentiation." The new hierarchic system of schools included primary schools, upper primary and higher primary, with or without the option to transfer to secondary schools, the *Realschulen*, *Oberrealschulen*, *Realprogymnasien*, and *Realgymnasien* which included extensive Latin and Greek.[927] Early leaving was done away with in principle and years at school extended. However, for the majority of *Gymnasium* students the duration of school attendance was defined by "occupational expectations, which in turn were predetermined by the occupations, social positions, and education of the parents.[928] During the period of system complementation conflict erupted between the Ministry of Culture and local authorities as the systematisation of education by administrative decree became increasingly difficult to enforce on the local level. An openness and flexibility had been built into the system which had allowed school and local officials to deviate from the general rules to take account of local needs. But such deviations exacerbated the 'central' versus 'local' conflict in light of the bureaucratic goal of systematisation.

After considering this short synopsis of Müller's three stages of systematisation it becomes apparent that Scottish schools passed through roughly the same three phases. Indeed, some would appear to be almost identical. During the years considered by this study the Scottish system could be considered to have passed into the phase of system complementation. By Müller's description this phases consisted of the 'rounding-out of the system through modification of existing forms' and the establishment of institutions to meet objectives not foreseen at the time of the system's constitution. This is undoubtedly what was happening in Scotland during the years from 1895-1914. The majority of this work deals with issues that fall within the spectrum of these two developments. For example, Supplementary Courses and Higher Grade Schools can be classified as institutions that were established and added to an existing system to meet needs and objectives not earlier foreseen. This is fundamentally true despite the fact that Craik often used rhetoric that would describe them as institutions that were meant to 'complete' the system, make it whole and responsive to the needs of the full range of Scottish youth. Clearly by 1895 a coherent 'system' existed, and these additions were meant to address perceived short-comings. Or rather, in the context of the National Efficiency movement and the newly exposed

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[927]Ibid., pp. 19, 22, & 35.
[928]Ibid., p. 21.

concern about Britain's international economic position, objectives that were nonexistent or not apparent when the system went through Müller's phases of emergences and constitution.

Also significant is that by this phase Scotland was experiencing some of the same conflicts as Germany; most notably the struggle between a central bureaucracy and local educational control. Discussed above in the context of the expanding role of central government, the desire of the SED to centralise at least some control of education was done, as in Germany, by legislation but mostly by administrative orders. In the case of Scotland this primarily took the form of circulars and school codes. The SED had, again similar to the German case, built into the structure a flexibility so that localities could take account of 'local needs'. Indeed, this was a central characteristic, and to many a key attribute of the reforms during the early part of this period. However, the desire for centralisation soon conflicted with this openness and flexibility, and SED officials experienced the same type of local enforcement problems as their German counterparts at the Ministry of Culture.

Where the comparison deviates is that the SED often viewed their new institutions, particularly Continuation Classes and Central Institutions, as components of a practical second 'system'. While they undeniably added to the established system in a more coherent way after control of the Science and Arts classes was passed to the SED, evening and other continuation work had existed for decades. If taken as a separate entity they could have been characterised as having passed through the phase of system emergence and having moved into that of constitution of the system. Indeed, from an bureaucratic and administrative perspective this is how Craik and the SED viewed them. Throughout the period the emphasis and objective was to establish a 'system of Continuation Classes and schools', and provide a link between them and the system below. This is demonstrated to a greater extent with regards to Central Institutions. Here there was clearly a focus to create a nationwide 'system' through central control, and provide a bridge into it. While Scotland held to the Müller's general pattern of systematisation, it also projected a model of several systems, one added to another and joined together by academic and curricular similarities and links. Thus it may be more appropriate in the case of Scotland to speak of the addition of 'systems' to the established structure to meet new and unforeseen objectives, rather than the addition of 'institutions'.

Possibly more important is whether the passage through these phases had the same affect and yielded similar results. A key outcome in Müller's German model was the loss of the secondary schools' comprehensive character to be replaced by a vertical differentiation and a new hierarchic system of schools. Müller's vertical

differentiation, represented by such characteristics as different streams within a school or level of school, was accompanied by a hierarchy of schools. However, in Scotland, even though a certain hierarchy existed among schools the greater development was in the lateral differentiation of schools. Rather than streams within an educational system, such as the case of secondary schools having a modern side leading to employment and a classical side leading to the universities, the SED created three streams that were systems of schools in and of themselves. It is to this distinction that Fritz Ringer's thesis on the segmentation of education applies.

Ringer describes segmentation as the "subdivision of educational systems into parallel schools or programmes that differ both in their curriculum and in the social origins of their students."[929] While recognising vertical segmentation (i.e. tracks within schools or higher levels of education cut off to all but an elite), Ringer also describes a horizontal segmentation in which there existed different school types or 'tracks' which existed parallel to one another. These tracks can be distinguished by a number of factors including type of curriculum, social composition of the students, residential versus non-residential, etc. There also existed differentials of 'inclusiveness' depending on the number of students the track encompassed, as well as different levels of impenetrability dependent upon how difficult it was for pupils to pass between the different track.[930] In addition, David Rubinstein writes about the "parallel" (rather than "end-on") nature of secondary education in England; viewing it as a separate entity with only tenuous connection to the basic elementary system down to 1907.[931]

This type of lateral segmentation is what occurred in Scotland during the period under consideration, along with schools in general losing their comprehensive character. As discussed in the text (see for example the quote on pages 33-34, and comments on page 44) it was the belief of Craik and many others that trying to have one school perform all educational tasks was one of the weaknesses of the Scottish system as it faced the demands of the 20th century . In addition, by 1904 Craik clearly described this segmented educational system in his speech at Kirkwall (see page 34), however a more detailed study is needed to determine how inclusive and impenetrable the tracks of the system were. In addition, it is left to future research to determine whether or to what extent this system engaged in 'social reproduction'.[932] What can

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[929]Ibid., p. 53.
[930]Ibid., p. 57.
[931]Rubinstein & Simon, *Evolution of the Comprehensive School,* p. 2.
[932]Halsey bases his definition of 'social reproduction' on the work of the French sociologist Emile Durkeim, and as such defines it as follows: "the organised intelligence of a society functioning to consolidate in each successive generation the values, norms and habits of thought embedded in its culture." Therefore, education plays an important role in "reproducing a given institutional order" and

be concluded here is that the pretext of SED reforms, by both Craik and Struthers, was that children from working-class backgrounds would probably remain in that social strata in adult life. Therefore, when expanding the educational opportunities available to them it was logical and proper that one provide a curriculum that would prepare them better for that future. As a final note it is interesting to look at the work of Harold Entwistle. He claims that to speak of "working-class education" implies that there is a "type of education appropriate to the working class, different from that which is relevant to other classes."[933] This is a distinction that was never explicitly made in Scotland, but as a practical reality it would appear that this view was not shunned.

Many historians who have considered English education during this period have agreed with the overall conclusion that it was based more on social considerations that on economics. For example, Brian Simon and David Rubinstein have tended to view it as purely a social issue enveloped by class conflict. Both write from a left of centre perspective, with Simon often adopting a Marxist viewpoint. For Rubinstein the history of British education (and the interminable consequences for the country) has been based around the conflict of the egalitarians and the inegalitarians, with the latter usually winning the day. His view of the history of education in England can best be summed up in his own words: "Much of the history of elementary education in England has been a chronicle of exploitation and deprivation of poor children by adults of other social classes. No other conclusion can be drawn from the historical evidence."[934]

This conflict, exploitation, and deprivation has its roots in the industrial revolution which for David Rubinstein created a society far more sharply divided by class than any of its predecessors. The result of the accompanying urbanisation was that the small governing class of England was confronted by enormous and rapidly expanding cities filled with poorly educated workers. Living in squalor this population was a potential revolutionary threat to the "thin crust of civilization on top." For this upper-crust the question was how to best cope with this new "dangerous working class." Two contrasting attitudes developed in the 19th century: should this worrisome element be forcibly repressed or should they "be absorbed within the existing order, given a place in society on the assumption that people with something to lose tend not to engage in rebellion?" It was these two conflicting attitudes that were the central motives of the governing elite, and were a major contributor to the "form

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reproducing entrenched hierarchies within society. From: Williamson, B. *Education, Social Structure and Development; A Comparative Analysis.* (London, 1979), pp. 4-8.

[933]Entwistle, H. *Class, Culture and Education.* (London, 1978), p. 63.

[934]Rubinstein, "Education and Social Class: an Historical Perspective" in *Education & Equality*, p. 19. (Note: Brian Simon assisted in the writing of this piece.)

and content of the education of working-class children."[935] Thus, education in the 19th and first part of the 20th century was viewed as a societal tool, and was principally used to keep the working-classes in check and society on its existing line. For David Rubinstien and Simon, businessmen and industrialists did not favour extended education because it might make a worker less likely to take an order. In short, education for working-class children "was not intended primarily to benefit them and enrich their lives, but rather to carry through an ulterior social strategy."[936]

In comparison, criticism of the theories of systematisation and segmentation centre on two aspects. First, James Albisetti criticises Müller for presenting systematisation as something that simply happens in time void of a human hand or intention.[937] This is not the case of this study. It is relatively easy to point to the guiding hand of Craik, Struthers, and the SED, as well as their intentions. Though it is somewhat more difficult to determine with precision to which forces they were responding. Second, Albisetti questions the underlying cynicism and criticism in the presentation of the discussion of systematisation. Müller points out that in Germany:[938]

> The Ministry of culture did not construct a system, or invent new school forms, in order to limit the students' expectations and prospects, or to reduce or divert them. But it did ascribe to the existing school forms a functional position in relation to the other school forms, and it ordered all these schools in a social and educational hierarchy of curicula and credentials. The imprecision in the definition of existing schools, the variety of their social and educational goals, the flexibility of their curicula and course durations, were replaced with precise regulations for each school type.

This same general statement can be applied to Scotland. Craik and the SED did not create Supplementary Classes, Higher Grade Schools, or expand Continuation Classes in order to limit the expectations and prospects of Scottish students. Rather they did these things in order to meet a perceived reality and need. The developments and significant reforms during these years did not make education in Scotland more "democratic" in the context of the historical Scottish ideal for education. The much valued tradition of the Parish School was lost, and the SED purposely created an entirely new and distinct stream of education for the "industrial and commercial classes" of the country. It led not to the secondary school and the university, but rather to the Supplementary Course, the Continuation Course, and finally the Central

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[935]Ibid.
[936]Ibid., p. 20.
[937]Müller, Ringer, & Simon, *Modern Educational System,* p. 210.
[938]Ibid., p. 39.

Institution. However, it should not be concluded that this represents a failure. Indeed, this was the great success of the period. Scottish education was never as democratic and egalitarian as it was envisioned to be. This study started with the premise (and fact) that at the beginning of the period the vast majority of students belonging to this class left school at an early age, and were rarely encouraged to carry on with their studies. By the end of the period not only was there a degree of specialisation in Scottish education, but students remained in school longer and were more likely to further their education in Continuation Classes and at a Central Institution. Craik, followed by Struthers, held as central to SED policy that working class pupils should have their educational opportunities extended and enhanced, thus raising the general level of education of this group in order to meet the challenges of the new century.

The final issue to be addressed may be the most far reaching, and certainly in the context of the research presented the most difficult to assess: how does this study contribute to the larger debate concerning Britain's industrial and economic decline. More specifically how does it affect the debate regarding the position of education vis a vis that debate. In the foreword to this study it is pointed out that much of the historical debate regarding British economic decline has focused on England to the relative exclusion of the important commercial and industrial centre of Scotland. In the essay "British Culture versus British Industry" Keith Robbins criticises the influential work of Martin Wiener (discussed below) for taking account only of 'English' culture in his search for an explanation to 'British' decline. He questions whether Wiener thought to consider a cultural identity other than an English one, or the fact that "A not insignificant part of British nineteenth-century industry was located in the West of Scotland."[939] However, this criticism can be levelled at almost every scholar of British decline. Indeed, Scotland has lacked the same type of vigorous historical debate over the decline of its industry and economy, and furthermore has been more or less absent in the intensive historical analysis done regarding 'British' decline. In fact it is almost expunged from every 'comprehensive' study.

Equally, it is explained in the foreword that there has been little attention paid to the role of Scottish education in the process despite the presence of an extensive evaluation of the English educational system. In Chapter One it is also noted that the educational reforms discussed took place at a time of renewed anxiety concerning Britain's economic position, and of Scotland's as a component. Education was viewed by Scottish educationalists as a key element of girding the country for the

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[939]Robbins, K. "British Culture Versus British Industry" in Robbins & Collins, B. (eds) *British Culture and Economic Decline.* (London, 1990), pp. 7-8.

international competition of the 20th century. This was similar to the state of affairs in England. The Education Act of 1870 has been viewed as a response to the extension of the franchise in 1867. Yet it was also very much a response to the dynamics of the international arena. Christopher Harvie explains that the Act was pushed forward by "external events which seemed to have ominous implications for Britain's military and commercial supremacy."[940] In his Parliamentary introduction of his education bill E. M. Forster proclaimed:[941]

> Upon the speedy provision of elementary education depends our industrial prosperity. It is of no use trying to give technical teaching to our artisans without elementary education; uneducated labourers--and many of our labourers are utterly uneducated--are, for the most part, unskilled labourers, and, if we leave our work-folk any longer unskilled, notwithstanding their strong sinews and determined energy, they will become overmatched in the competition of the world.

Scotland's educational reformers were certainly acting within this same frame of mind. Changing the educational structure, curriculum, and most importantly the expectations of what the school should provide was bounded by the perceived need for individuals educated in a 'new' manner. The provision of technical and commercial education was one reflection of this concern and thinking, as was the desire to raise the overall quality and level of education for the industrial and commercial classes. Thus, one conclusion that can be drawn from this thesis is that the SED did try to improve the commercial and technical education available for workers. In many cases, such as Higher Grade Schools and Continuation classes, this effort and the direction of the classes was changed to meet less specific educational goals as well as perceived social needs. Therefore, the impact that these reforms had in the areas of commercial and technical education was reduced.

If the very general conclusion can be made that at least in part educational reform was driven by some of the same economic dynamics as change in England, the question remains how the Scottish experience fits into the larger debate about the role of education in British decline. The American educationalist Michael W. Apple states that "Most of the current discussion about the role of schooling in advanced industrial societies has been stimulated by a large quantity of scholarship that is critical of what educational systems do."[942] Furthermore, the British sociologist of education A. H.

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[940]Harvie C., Martin G., & Scharf A. (eds.) *Industrialisation & Culture, 1830-1914.* (London, 1970), p. 142.

[941]Parl. Deb. 3rd Series. Vol. 199, Feb. 17, 1870. 465-6.

[942]Apple, M. W. *Cultural and Economic Reproduction in Education; Essays on Class, Ideology, and the State.* (Boston, 1982), p. 1.

Halsey comments that "there has been a growing realisation that...education not only does not contribute to economic growth but can actually hold it back."[943] This is indeed the case in the historiography of British education during this time period. The historical analysis of education has been primarily negative; possibly unfairly so. However, the very real role that education played in British decline can not be discounted. There is an abundance of evidence (see Chapter 1) that during these years British businessmen, especially those abroad, suffered from a deficit in pertinent fields of education that their rivals did not. For example, Ross Hoffman chronicled the lack of commercial education and knowledge of foreign languages from which agents of British firms abroad sufferer. Quoting from the *Westminster Gazette* Hoffman noted that this deficiency was "'the basis of the Germans in pushing their commerce.'" Furthermore, consular reports regularly reported that the British were too often ignorant of the language and customs of the countries in which they tried to do business. Hoffman concluded, "British business was apparently not training up a class of men from which to recruit sufficient first-class commercial travellers; indeed, many of the representatives employed by British firms were of necessity German."[944]

Though not the first or only,[945] Martin J. Wiener's 1981 book *English Culture and the Decline of the Industrial Spirit, 1850-1980* has become the quintessential statement on the deficiencies of English (although he claims to speak for 'Britain') education as they relate to the debate over decline.[946] His focus is on the elites of the educational system: the ancient universities and public schools. The central complaint is the stubborn refusal of these institutions to embrace a modern curriculum, and their cultural distain for the rigours of industry and commerce. Of the teaching of science Wiener wrote: "science was linked in the public mind with industry, and this damaged its respectability in upper-class eyes. Industry meant an uncomfortable closeness to working with one's hands." On the public school's attitude toward business he claimed: "If technical skills necessary for professionalism were discouraged at public

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[943]Williamson, B. *Education, Social Structure and Development,* p. 1.

[944]Hoffman, R. J. S. *Great Britain and the German Trade Rivalry; 1875-1914.* (Philadelphia, 1933), p. 87-88.

[945]For example, with regards to criticism of the public schools Bertrand Russell's *Education and the Social Order,* (London, 1932) describes the public school's "contempt for intelligence, and more particularly for scientific intelligence." With regards to the issue of social reproduction (or more appropriately in the context of Wiener 'cultural reproduction) Russell writes that the public schools were "designed to bolster up a system which is intellectually indefensible." pp. 80-81.

[946]Dinetenfass's work is also worthy of note among more recent works. Though much less condemning, he also argues that while the British workforce was much better educated during these years than critics admit, they were often educated only in how things were done. As such they constituted a very able workforce responsive to the instructions of employers. but one abjectly unable to suggest ways of doing things better or more productively. Trained in the art of how to perform certain functions they were less adaptable to new methods and machines, and less accepting of them.

school, the world of business was openly disparaged." And his conclusion on the work of the public schools was that it prepared students to be "excellent administrators of a far-flung empire," but it did not fit them for "economic leadership." Furthermore, "The public schools nurtured the future elite's political, not economic, abilities and a desire to maintain stability and order far outweighed the desire to maximize individual or national wealth."[947] Wiener's criticism of the late-Victorian ancient universities is much the same.

Yet to have a plausible relationship to the greater question of decline these attitudes had to have a wider impact than on the narrow elite that such institutions served. Wiener's thesis is that the public schools and their curriculum became "archetypal institutions" which all desired to attend or model themselves upon. The latter task was made more easy when in 1902 a state system of secondary education was developed. Its development was done by men trained at the public schools and committed to their ideals. Thus the new state secondary schools embraced "a curriculum, an outlook, and forms of organization in line with the ideals of the education of the gentry." Thus the molding of state education "affecting every inhabitant of Britain" reflected the education of the elite.[948] Similarly the ancient universities trained up an elite that went into government and other institutions imbued with an anti-capitalist prejudice. Wiener concludes:[949]

> Thus, revivified public schools and ancient universities furnished the re-formed and cohesive English elite with a way of life and an outlook that gave little attention or status to industrial pursuits. This development set England apart from its emerging rivals, for in neither the United States nor Germany did the educational system encourage a comparable retreat from business and industry.

Though focused on the recent past and not exclusively Britain, Apple's thesis that schools are basically institutions of economic and cultural reproduction recognises Wiener's thesis by acknowledging that schools are cultural as well as economic and educational institutions. In addition, it gives a societal reference point for the historical criticism of British education. In many ways Apple and Wiener both echo the criticism of Neill in 1916 (p. 24). The schools did best that which they had always done. Yet Wiener's thesis rings a little bit hollow for Scotland, and not simply because he fails to recognise the existence of life north of the Tweed.

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[947]Wiener, M. J. *English Culture and the Decline of the Industrial Spirit; 1850-1980.* (Cambridge, 1981), pp. 18-19, 21.
[948]Ibid., p. 21.
[949]Ibid., p. 24.

His focus on secondary education fails to take account of the parallel system of education in both England and Scotland aimed at the working classes. Indeed, his pronouncement that the new system of secondary education "affected every inhabitant of Britain" is misplaced. In Scotland while it may have been true that businessmen were resistant to educational change that disrupted their patterns of work, the 'elite' of educationalists were very much in favour of extending education for the working class. Craik himself was a Glasgow High School graduate, who continued to Glasgow University. A Snell exhibition took him to Balliol College, Oxford. Yet, he did not seek to reproduce his Oxford experience or curriculum when reforming Scottish education. Much the opposite, he sought to develop a distinct educational path for those not destined for secondary schools and university. The fact that this education may have segregated working class youth to a different curriculum, and the argument that it shut off the path to the university is immaterial in this respect. The fact of the matter was that despite the much romanticised, idealised, and embraced ideal of a purely democratic and open educational system in Scotland, the vast majority of working class youth ended their education at a young age without much encouragement to carry on. After the reforms of the late 19th and early 20th more working-class youth stayed on for more years, continued through to continuation classes, and went on to central institutions.

Wiener's greatest critic and the centre of much attention himself has been W. D. Rubinstein. He directly attacks Wiener in his book *Capitalism, Culture and Decline in Britain.* The core of Rubinstein's thesis regarding education seems to be less an assertion and more an attack. For him too many questions have been left unanswered. However, Rubinstein as well fails to take account of the parallel educational system, and ignores Scotland. His worry is that a direct connection has not been proven between the work of the public schools and ancient universities, and the attitudes of elites.[950] While Scotland did not share the public school tradition, this study has not been primarily concerned with that area of education. The vital flaw of both of these lauded accounts is that they fail to consider anything other than the narrow elite of an English system.

An additional argument within this debate and present in this thesis is that workers, technicians, and their employers depended too much upon 'on the job' training, and did not place a value on additional schooling. This argument is present in Wiener's book, though to a lesser extent than his criticism of the public school tradition. It is more prevalent in the work of D. C. Coleman. With regards again solely to England, he argues that while "pure" science (i.e. the abstract study of the

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[950]Rubinstein, W. D. *Capitalism, Culture & Decline in Britain.* (London, 1993), p. 105.

nature of things) gained some favour in the 19th century, "applied science" did not. Therefore, the study of the latter never was embraced. Furthermore, the perception of reliance on workshop training is valid. Coleman, however, argues that it did not rest upon a desire to keep workers ignorant and obedient (as Simon and D. Rubinstein might argue), but rather the firm belief that this was the best method of training. Businessmen could "'conceive of no better school than the workshop'" where there was present "'the experience and skill of the best artisans'", and "the very atmosphere" of the craft.[951]

As discussed above and in the body of the work, employers in Scotland followed this trend of preferring 'in-house' or 'workshop' training. However, the evidence of this thesis refutes Coleman's conclusions. While there were probably some employers who firmly believed that this method was superior to all others, many (maybe even a majority) retained their commitment for less worthy motives. In Chapter 3 it was shown that businessmen in commerce widely discounted the value of additional schooling, primarily as a result of their desire to employ younger boys. An element of this preference was their unwillingness to start individuals with more schooling in a higher position or at a higher wage. Second, evidence is presented in Chapters 4, 5, and 6 that employers objected to further schooling because it disrupted work patterns and labour schedules that allowed them to maximize their labour. In Chapter 6 it was reported that 80% of Glasgow employers opposed mandatory attendance at continuation classes because "work would be dislocated" (page 163). Furthermore, as they were tied into the greater British economy Scottish employers maintained (probably rightfully so) that changing these patterns would put them at a disadvantage to other areas of the country (as discussed in Chapter 6). Only if action was taken that would affect all of the U.K. would Scottish businessmen not be handicapped. This was consistently voiced by employers in and around Glasgow, especially when the school board experimented with compulsory attendance at continuation schools. Finally, evidence presented in Chapter 4 resounding criticises the idea that workshop training was aimed at providing the 'best' education and training for Scottish workers. Rather, with the overwhelmingly agreed upon death of the apprenticeship system such training was limited in scope, often for a limited time (as in the Dundee jute mills for boys), or constituted work rather than education. The desire of the SED and others to extend opportunities for technical and commercial education constantly confronted these entrenched views of Scottish business.

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[951]Coleman, D. C. "Gentlemen and Players" in Economic History Review. 2nd ser., Vol. 26, (1973), pp. 102 & 104.

It is hoped that this study has gone some way to correcting some of the deficiencies discussed in the Foreword and here in the Conclusion. In doing so it has been the aim of this work not only to provide a better understanding of Scottish education during this period, but also provide a framework and foundation for those scholars who will pursue these topics as they progressed into the 20th century. Furthermore, it is hoped that this study has addressed the Scottish element of some of the wider historical debates that have previously been obsessed with England. Broader conclusions on such issues as education's role in British decline, the social element of British education, and the response of business culture to working-class education in Britain can not be made if the crucial area of the Scottish experience is not taken into consideration. Yet, even in this respect this dissertation represents a starting point. There is much more work to be done, especially with regards to the topics discussed as they relate to the Highlands and the area outside of the industrial and commercial belt of Glasgow and Edinburgh.

Bibliography

Primary Sources

Files of the Scottish Record Office, Edinburgh

ED7 1/4 "Correspondence on Sloyd & Manual Training."

1/9/7 1897-1899 "Congested Districts"

1/9/1 1897-1903 (1) "Correspondence on Commercial & Technical Education."

1/10/2 1901 (2) "Correspondence on Modern Languages."

1/11/1-2 1898-1901 "Correspondence on Physical Training in School."

1/21 1902-1913 "Supplementary Courses." (1), (2), & (3).

1/23 "Correspondence on Royal Commission on Physical Training 1903."

1/24 "Higher Grade Schools--Course on Curicula Submitted."

1/26 "Co-education of Boys & Girls."

1/29 "Memorandum on Teaching of School Subjects."

1/31 "Miscellaneous Memoranda, 1907-1914."

1/36 "Russian for Commercial Purposes."

1/64-68 1895 "Royal Commission on Secondary Education."

1/69 1895 "Summary and Index for Royal Commission Files."

1/72 1904-1906 "Continuation Classes and Central Institutions."

1/78 & 79 "Correspondence between the Secretary of the Department and Lord President of the Privy Council."

3/2 "Correspondence etc. on Transfer of Science and Art to SED."

3/6 "Urging Transference of SED to Edinburgh."

3/15 1895-1899 "Minutes of the Committee of the Council on Education in Scotland.

3/16 1900-1906 "Minutes of CCES."

3/17 1907-1909 "Minutes of CCES."

3/18 1907-1911 "Minutes of CCES."

3/21 1872-1946 "SED Minute Book No. 1."

4/27-38 "Conferences with Chief Inspectors."

6/7 "Memorandum on Provision 17 of 1908 Act."

ED 14 519 "Papers on Technical Schools Act 1887."

50-61, 64, 70-78 "Papers on 1908 Bill & Act."

ED 26 218-301 "Central Institution Papers."

Files of the Strathclyde University Archives

1. Files on the Athenœum Commercial College

H.1.1. 6 & 7	"Minute Books."
H.1.9.2	"Various: including Glasgow Athenœum Special Minute Under Article 87 of the continuation Class Code of 1903."
H.2.3	"Annual Reports."
H.2.4	"Calendar & Prospectus."
H.2.5	"SED."
H.2.3.1	"Annual Reports."
H.2.4.1-5	"Calendars & Prospectuses."

2. Files of the Glasgow and West of Scotland Technical College

E.1.1.1-8	"Reports. In Minutes of January Meetings."
E.1.1.6-12	"Minute Books."
E.1.3.2-5	"Indexes to Minute Books."
E.4.1.1-3	"Reports."
E.6.1.26	"Personnel Records--Academci and Non-Academic For Staff 1899-1950."
E.8.1.1	"SED."
E.10.1.9-22	"Calendars & Prospectuses."
E.10.2.15	"Calendars & Prospectuses; Evening Classes."

3. Files of the Incorporated Weaving, Dyeing and Printing college of Glasgow

6.6.1, 2, & 3	"Annual Reports."
G.7.3.	"Report by the Secretary to Governors on The Scotch Education Department's Code of Regulations for Continuation Classes, 1902."
G.12.1-11	"Secretary's Correspondence; 1898-1908."
G.28.8.4	"Miscellaneous."

4. Miscellaneous Files

G.28.8.4	"Galashiels Technical School. Prospectus, 1906-07."

Files of the Heriot-Watt College Archives

1. Minutes of Meeting of Governors
Printed minutes including Minutes of Heriot-Watt College Committee, Reports on Work of the Session, Reports by the Principal, Reports of Assessors, etc.

HWC 1/2/9	1895
HWC 1/2/10	1896
HWC 1/2/11	1897
HWC 1/2/12	1898
HWC 1/2/13	1899
HWC 1/2/14	1900
HWC 1/2/15	1901
HWC 1/2/16	1902
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HWC 1/2/21	1907
HWC 1/2/22	1908
HWC 1/2/23	1909
HWC 1/2/24	1910
HWC 1/2/25	1911
HWC 1/2/26	1912
HWC 1/2/27	1913
HWC 1/2/28	1914

2. Letters
Private Letter Book No. 1: Handwritten Personal Correspondence of Principal Laurie, 1.1.1901-28.2.1907. HWC 3/1/2.

Letter Book No. 1: Handwritten & Typed Official Correspondence of Principal Laurie, 13.11.1900-13.11.1901. HWC 3/1/10.

Letter Book No. 2: Handwritten & Typed Official Correspondence of Principal Laurie, 13.11.1901-17.3.1903 HWC 3/1/11.

Letter Book No. 3: Handwritten & Typed Official Correspondence of Principal Laurie, 17.3.1903-11.3.1904 HWC 3/1/12.

3. Heriot-Watt College, Calendars
Printed individual volumes by session

Calendar 1895-96 HWC 2/10/22
Calendar 1896-97 HWC 2/10/23
Calendar 1897-98 HWC 2/10/24
Calendar 1998-99 HWC 2/10/25
Calendar 1899-00 HWC 2/10/26
Calendar 1900-01 HWC 2/10/27
Calendar 1901-02 HWC 2/10/28
Calendar 1902-03 HWC 2/10/29
Calendar 1903-04 HWC 2/10/30
Calendar 1904-05 HWC 2/10/31
Calendar 1905-06 HWC 2/10/33
Calendar 1906-07 HWC 2/10/34
Calendar 1907-08 HWC 2/10/35
Calendar 1908-09 HWC 2/10/38
Calendar 1909-10 HWC 2/10/39
Calendar 1910-11 HWC 2/10/41
Calendar 1911-12 HWC 2/10/42
Calendar 1912-13 HWC 2/10/44
Calendar 1913-14 HWC 2/10/47

Reports of the Edinburgh School Board
Printed separately in pamphlets
In NLS
Report of Visit to Schools in England and on the Continent, Sept. 1911.
Report on the Question of Day Trade Continuation Classes, Feb. 1914.
Reports by Section Committee of Advisory Council on Visits to Continuation Classes, Session 1914-15.
Report by the Continuation Classes Committee on the Continuation Classes for Winter Ses. '14-'15 & Summer Ses. '14.
Report by Organiser on Co-operation of Employers in Edinburgh, etc. Ses.'14-'15.
Report of the Proceeding of the Fourteenth School Board for the City, 1911-14., March 1914.
Seventh Annual Report by the Medical Officer, July, 1914.

Minutes of the Edinburgh School Board
Printed and bound annually in NLS, 1908-14

Reports of the Glasgow School Board
"Report on the Organisation of the Physical Training carried out in the Public Schools of the School Board of Glasgow" 1910.40 (1910).

Books, Pamphlets, & Articles

The Edinburgh Merchant Company, Edinburgh & Leith Chambers of Commerce. *Report by Joint Sub-Committee on Commercial Education* (Edinburgh, 1901).

"German Industrial Progress" The Saturday Review of Politics, Literature, Science, and Art. Dec. 19, 1895 (Vol LX) p. 806.

Armstrong, "The Reign of the Engineer" Quarterly Review. Oct. 1903, Vol. 198. p. 464.

Blackie, W. G. "Commercial Education; An Address" [Pamphlet] (Glasgow, 1888).

Bray, R.A. "The Apprenticeship Question." The Economic Journal. 1909, Vol. XIX, p. 404.

Dale, F. H. "The Continuation Schools in Saxony" in *Special Reports on Educational Subjects (Board of Education) Vol. I.* (London, 1897).

Darroch, A. *The Children; Some Educational Problems* (London, 1907).

---*Education and the New Utilitarianism; And Other Educational Addresses* (London, 1914).

Dyer, H. *Education and Industrial Training of Boys and Girls* (Glasgow, 1913).

Craik, K. *State Education; Its Scope and Responsibilities* (London, 1895).

Coates, T. F. G. *Lord Rosebery, His Life and Speeches* (London, 1900).

Cunyghame, H. *The Technical Educator; An Encyclopedia of Technical Education, Vol. I* (London, 1901).

Curr, A. L. "Commercial Education in Britain" The Secondary School Journal Oct. 1909, p. 76.

Douglas, C. M. & Jones H. *Scottish Educational Reform, A Scheme of District School Boards & A National Council* (Glasgow, 1903).

Gibson, W. J. *Education in Scotland; A Sketch of the Past and the Present* (London, 1912).

Haldane, R. B. *Education and Empire; Addresses on Certain Topics of the Day* (London, 1902).

Hudson, *History of Adult Education* (London, 1851).

Jolly, W. "Physical Education and Hygiene in Schools" The Journal of Education, reprinted in *Pamphlets on Education*.. pp. 1-21 (London, 1876).

Kerr, J. *Scottish Education, School and University* (Cambridge, 1902).

Lockyer, N. *Education and National Progress; Essays and Addresses, 1870-1905* (London, 1906).

McKenzie, F. A. *The American Invaders.* (London, 1902).

Ramsay, G. G. "Efficiency In Education." Pamphlet #17, (Glasgow, 1902).

Reynolds, J. H. "Technical Instruction in the City of Manchester" *Handbook of the Meeting of the British Medical Association* (Manchester, 1902).

Rosebery, Lord. *Miscellanies: Literary and Historical, II.* (London, 1921).

Sadler, M. (ed.) *Continuation Schools in England & Elsewhere; Their Place in the Educational System of an Industrial and Commercial State.* (Manchester, 1907).

Sandiford, P. "Compulsory Continuation Schools" University Review, April, 1907.

Shadwell, A. *Industrial Efficiency: A Comparative Study of Industrial Life in England, Germany & America* (London, 1906).

Shaw, B. (ed.) *Fabianism and the Empire.* (London, 1900).

Stead, A. *Great Japan: A Study of National Efficiency* (London, 1905).

Tawney, R.H. "The Economics of Boy Labour." The Economic Journal. 1909, Vol. XIX, p. 517.

Williams, E. E. *Made in Germany* (London, 1896).

Educational News

Volume XIII 1888
Volume XVI 1891
Volume XVII 1893
Volumes XX 1895 through Volume XXXIX 1914

Other Newspapers

Aberdeen Free Press
Daily Telegraph
Dundee Advertiser
The Galashiels Telegraph
Glasgow Herald
Scotsman

Acts of Parliament

Technical Schools (Scotland) Act 1887.
Local Taxation (Customs and Excise) Act 1890.
Education and Local Taxation Account (Scotland) Act 1892.
Education (Scotland) Act 1901.
Education (Scotland) Act 1908.
The Childrens Act 1908
Education (Scotland) Act 1913

[Many of these Acts are reprinted in Graham, J. E. (ed.) *Manual of Education Acts* (London, 1902), *The Education (Scotland) Act , 1908 & Acts Relating Thereto* (London, 1909); and Roxburgh, R. W.*The Law of Education In Scotland* (Edinburgh & Glasgow, 1928)].

Parliamentary Debates: 4th ser.

1. Concerning the Education (Scotland) Act 1908

Volume 186
Volume 188
Volume 192
Volumes 196 through 198

2. Other Miscellaneous Debates

Volume 110
Volume 123
Volume 160

Parliamentary Papers

1. Reports

"Reports of the Committee of Council on Education in Scotland." Session 1895-96 through 1914.

"General Reports on the Schools in the Southern Division of Scotland." Annual reports by Her Majesty's Chief Inspector of Schools in Scotland. Also, Western Division, 1895-1914.

"Report on Inspection of Higher Class School and Leaving Certificates" Annually, 1895-1914.

"Reports on Continuation Class and Central Institutions" Southern and Western Divisions. Accompanying annual CCES report to 1910. Then in Reports & c. issued annually, to 1914, NLS.

"Report on Secondary Education" by Craik, Struthers. Accompanying annual CCES report to 1910. Then in Reports & c. issued annually, to 1914, NLS.

"Reports by the Principal of Heriot-Watt College" 1903-1914.

"Report on Physical Training in Schools" Foster, 1905.

"Report on a Collection of Statistics as to the Physical Condition of Children attending the Public Schools of the School Board of Glasgow" Mackenzie & Foster, 1907.

"First Report on the Medical Inspection of School Children in Scotland" 1912-13, Mackenzie.

2. Circulars

1898 Circular 221: Higher Grade Schools, PP 1899 XXVI.
Circular 223: Examination for Labour Certificates, PP 1898 XXVIII.
Circular 231: Higher Grade Schools, PP 1899 XXVI.

1900 Circular 279: Physical Exercise, PP 1900 XXIV.

1901 Circular 318: Leaving Certificate, PP 1901 XXII.
Circular 320: Continuation Class Code, PP 1901 XXII.

1902 Circular 350: Continuation Class Code (Article 70), PP 1902 XXXII.
Circular 340: Leaving and Intermediate Certificates, PP 1907 XXIII.

1903 Circular 374: Supplementary Courses, PP 1903 XXII
Circular 375: Commercial Certificate, PP 1903 XXII

1905 "Selection of Circulars. Part IV Continuation Classes" PP XXIX 1905.

1906 Circular 389: Intermediate Certificates, PP 1906 XXX.

3. Codes, Memorandums etc.

"Scotch Code of Regulations for Evening Continuation Schools" Published annually, 1895-1900.

"Scotch Code of Regulations for Continuation Classes" Published annually, 1901-1914.

"Scotch Education Department's Code for Day Schools" Published annually, 1895-1914.

"Memorandum Explanatory of the Education (Scotland) Bill, 1908" PP 1908 LXXXVI.

"Return showing Extent to Which, and the Manner in Which, Local Authorities in England, Wales, and Scotland, & Ireland are Applying funds to the Purposes of Technical Education." 1900-1908.

"Special Minute under Article 87 of the Continuation Class Code."

"Royal Commission on Physical Training (Scotland) Report" PP 1903 XXX.

"Memorandum on the Medical Examination and Supervision of School Children" 1909
Reports & c.

"Minute Regarding the Provision of Medical and Supervision of Pupils Attending Schools" 1913, PP 1913 L.

Secondary Source Material

Aldcroft, D. H. (ed.) *The Development of British Industrial and Foreign Competition, 1875-1914* (London, 1968).

Allsobrook, D. I. *Schools for the Shires* (Manchester, 1986).

Anderson, R. D. *Education and Opportunity in Victorian Scotland* (Edinburgh, 1989).

Apple, M. W. *Cultural and Economic Reproduction in Education; Essays on Class, Ideology, and the State.* (Boston, 1982).

Ball, N. *Educating the People; A Documentary History of Elementary Schooling in England, 1840-1870* (London, 1983).

Beale, J. M. *A History of the Burgh & Parochial Schools of Fife* (Edinburgh, 1983).

Belchem, J. *Class, Party and the Political System in Britain, 1867-1914* (Oxford, 1990).

Best, J. *Mid-Victorian Britain, 1851-1875* (London, 1971).

Birse, R. M. *Engineering at Edinburgh University; A Short History, 1673- 1983.* (Edinburgh, 1983).

Bond, M. F. *Guide to the Records of Parliament* (London, 1971).

Bone, T. R. (ed.) *Studies in the History of Scottish Education.* (London, 1967).

---*School Inspection in Scotland; 1840-1966.* (London, 1968).

Campbell, R.H. *The Rise and Fall of Scottish Industry, 1707-1939* (Edinburgh, 1980).

Checkland, O. and S. *Industry and Ethos; Scotland 1832-1914* (London, 1984).

Coleman, D. C. "Gentlemen and Players" in Economic History Review. 2nd ser., Vol. 26, (1973).

Craigie, J. *A Bibliography of Scottish Education, 1872-1932)* (London, 1974)

Dintenfass, M. *The Decline of Industrial Britain* (London, 1992)

Donaldson, G. (ed). *Four Centuries; Edinburgh University Life.* (Edinburgh, 1983)

Donnachie, I. *A History of the Brewing Industry in Scotland.* (Edinburgh, 1979).

Entwistle, H. *Class, Culture and Education.* (London, 1978).

Field, J. H. *Toward a Programme of Imperial Life; the British Empire at the Turn of the Century.* (Oxford, 1982)

Fraser, W. H. & Morris, R. J. (eds.) *People and Society in Scotland, Volume II, 1830-1914* (Edinburgh, 1990)

Gilbert, B. B. *The Evolution of National Insurance in Great Britain; The Origins of the Welfare State.* (London, 1966)

Grier, L. *Achievement in Education; The Work of Michael Ernest Sadler, 1885-1935.* (London, 1952).

Haldane, R. B. *An Autobiography* (London, 1928).

Harvie C., Martin G., & Scharf A. (eds.) *Industrialisation & Culture, 1830-1914.* (London, 1970).

Hay, J. R. *The Development of the British Welfare State, 1880-1975.* (London, 1978).

Hendrick, H. *Images of Youth. Age, Class, and the Male Youth Problem, 1880-1920* (Oxford, 1990).

Hoffman, R. J. S. *Great Britain and the German Trade Rivalry; 1875-1914.* (New York, 1964).

Humes W. M. & Paterson, H. M. *Scottish Culture and Scottish Education, 1800-1980* (Edinburgh, 1983).

Humphries, S. *Hooligans or Rebels; An Oral History of Working-Class Childhood and Youth 1889-1939* (Oxford, 1981).

Hurt, J. S. *Elementary Schooling and the Working Classes, 1860-1918* (London, 1979).

Jones, D. K. *The Making of the Education System 1851-1881* (London, 1977).

Kang, Hee-Chun, "Equality of Educational Opportunity; Ideas and Politics, 1900-1918", *British Journal of Educational Studies* , Vol. XXXII, (1984), p. 58.

Kelly, T. *A History of Adult Education in Great Britain* (Liverpool, 1992).

Kennedy, P. *The Rise and Fall of the Great Powers* (New York, 1987).

Knox, H. M. *Two Hundred and Fifty Years of Scottish Education, 1696-1946* (Edinburgh & London, 1953).

MacLean, I. A. *The History of Dunfermline College of Physical Education.* (Edinburgh, 1976).

Mansbridge, A. *Margaret MacMillan, Prophet and Pioneer* (London, 1932)

McCann, P. *Popular Education & Society in the 19th Century* (London, 1977).

Morgan, A. *Education and Social Progress* (London, 1916).

---*Makers of Scottish Education* (London, 1929).

---*Rise and Progress of Scottish Education* (Edinburgh, 1927).

Müller D., Ringer F., Simon B. *The Rise of the Modern Educational System; Structural Change and Social Reproduction; 1870-1920.* (Cambridge, 1987).

Neill, A. S. *A Dominie's Log (London, 1916)* .

Paterson, F. & Fewell, J. (eds.) *Girls in Their Prime; Scottish Education Revisted* (Edinburgh, 1990).

Paz, D. G. *The Politics of Working-Class Education in Britain* (Manchester, 1980).

Robbins, K. *The Eclipse of a Great Power; Modern Britain 1870-1992.* (New York, 1994).

---& Collins, B. (eds) *British Culture and Economic Decline* (London, 1990).

Robertson, Paul L. "Technical Education in the British Shipbuilding and Marine Engineering Industries, 1863-1914" The Economic History Review. Vol. XXVII, No. 2, May 1974,

Roderick, G. W. & Stephens M. D. *Education and Industry in the Nineteenth Century; The English Disease?* (London, 1978).

Roxburgh, J. M. *The Second School Board of Glasgow, 1873-1919* (London, 1971).

Rubinstein, D. *School Attendance in London; 1870-1904; A Social History.* (Hull, 1969).

---(ed.) *Education and Equality.* (London, 1979).

--- & Simon, B.*The Evolution of the Comprehensive School; 1926-1972.* (London, 1973).

Rubinstein, W. D. *Capitalism, Cullture & Decline in Britain; 1750-1990.* (London, 1994).

Russell, R. *Education and the Social Order.* (London, 1932)

Scotland, J. *The History of Scottish Education. Volume Two: From 1872 to the Present Day* (London, 1969).

Searle, G. R. *The Quest for National Efficiency; A Study in British Politics and Political Thought, 1899-1914* (Oxford, 1971).

Semmel, B. *Imperialism and Social Reform, English Social-Imperial Thought 1895-1914.* (London, 1960).

Simon, B. *Education and the Labour Movement* (London, 1965).

Smout, T. C. *A Century of the Scottish People, 1830-1950* (London, 1986).

Sutherland, G. *Policy-making In Elementary Education, 1870-1895* (Oxford, 1973).

---(ed.) *Studies in the Growth of Nineteenth Century Government.* (London, 1972),

Taylor, A. J. *Laissez-faire and State Intervention in Nineteenth-century Britain.* (London, 1977).

Thompson, I. "The Origins of Physical Education in State Schools" Scottish Educational Review Vol. 10, 1978, p. 15.

Thornhill, W. (ed.) *The Growth and Reform of English Local Government.* (London, 1971).

Turner, A. L. (ed.) *History of the University of Edinburgh* (Edinburgh, 1933).

Wade, N. A. *Post-Primary Education in the Primary Schools of Scotland, 1872-1936* (London, 1939).

Walker, W.M. *Juteopolis: Dundee and Its Textile Workers, 1885-1923.* (Edinburgh, 1979).

Wallace, L. E. *Physics at Heriot-Watt University, 1821-1992.* (Edinburgh, 1993).

Weaver, J. R. H. & Davis, H. W. C. (eds.) *Dictionary of National Biography; 1912-21; 1922-1930* (Oxford, 1927 & 1937).

West, E. G. *Education and the Industrial Revolution* (London, 1975).

Wiener, M. J. *English Culture and the Decline of the Industrial Spirit; 1850-1980.* (New York, 1981).

Williamson, B. *Education, Social Structure and Development; A Comparative Analysis.* (London, 1979).